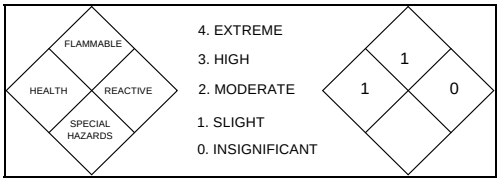
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 100 ROYAL EDGE EPDM MEMBRANE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **EPDM Membrane**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **NA**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% wt or % vol	OSHA STEL	OSHA PEL	ACGIH TLV
		None	**100**			

This material is a fully vulcanized rubber sheet which falls under the article exemption provided for under OSHA 1910.1200. There are no recognized hazards associated with normal use of this product.

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Rubber Sheet-mild odor**	Physical State: **Solid**	Solubility in Water: **Insoluble**
Boiling Point: **NA**	Specific Gravity (HO=1) **NA**	Melting Point: **NA**
Vapor Pressure: **NA**	Vapor Density (Air=1) **NA**	Freezing Point: **NA**
Percent Volatiles: **NA**	Evaporation Rate: **NA**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **Not Applicable**	Flammable Limits (in air): **Not Established**
Extinguishing Media: **Carbon Dioxide, foam, sand/earth. Dry chemical and foam can also be used**.	Fire Fighting Procedures: **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.**	Special Fire & Explosion Hazards: **Oil "bleeds" from material when burning**.
Method Used: **Not Established**	Auto-Ignition Temperature: **Unknown**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors**.
Effects of Overexposure: **Medical Conditions Aggravated By Exposure** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions**.	
Acute: **Not Established**	Carcinogenicity: **IARC, NTP, and OSHA do not list this product as a carcinogen**.
Chronic: **No known adverse effects.**	

Emergency & First Aid Procedures:

Eye Contact:

Not Established

Skin Contact:

Physical form should preclude and harmful effect from contact.

Inhalation:

NA

Ingestion:

Consult a Physician

Primary Route of Entry:

None

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable	**Not Established**
Hazardous Decomposition Products:	Hazardous Polymerization:
Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released during a fire.	**Will not occur**

Conditions to Avoid:
Open flames, heat and sparks.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Scoop or shovel material into sealed containers.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of in accordance with local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
NA	**Safety glasses recommended.**
Protective Gloves:	Other Protective Equipment:
Gloves are recommended to prevent skin contact.	**None required under normal installation conditions.**
Ventilation: **Store and use in well ventilated areas**.	

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility.

Other Precautions:
Store material in original shipping packaging.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency:	Identification Number:
Not Regulated	**Not Applicable**
Proper Shipping Name:	Labels Required:
Not Applicable	**Not Applicable**
Hazard Classification:	Other Requirements:
Not Applicable	**Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:

November 1992

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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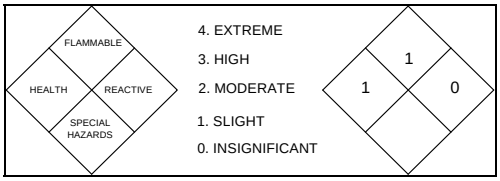
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 101 ROYAL EDGE UNCURED EPDM FLASHING MEMBRANE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Uncured EPDM Flashing Membrane**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **6,and 12 inch Uncured Flashing**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Chemical Name:	Common Name:	CAS#:	% (by wt)	Exposure Limits:
Nonhazardous as per 29 CFR 1910. 1200.	**None**	**None**	**100**	**Nonhazardous as per 29 CFR 1910. 1200.**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black, solid with no odor**	Physical State: **Solid**	Solubility in Water: **NA**
Boiling Point: **NA**	Specific Gravity (Water=1) **Varies**	Melting Point: **Not Established**
Vapor Pressure: **NA**	Vapor Density (Air=1) **Not Established**	Freezing Point: **Not Established**
Percent Volatiles: **Unknown**	Evaporation Rate: **NA**	Reactivity in Water: **Not Established**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **> 200° C**	Flammable Limits (in air): **NA**
Extinguishing Media: **Dry chemical, carbon dioxide, water fog or foam**. **Water should be used to keep fire exposed containers cool.**	Fire Fighting Procedures: **Treat as Class "B" Fire.** **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products**. **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **May form toxic materials**: **Carbon Dioxide, Carbon Monoxide, Oxide of nitrogen, Sulfur Dioxide, and acrid smoke and irritating fumes.**	
Method Used **Not Established**	
Auto-Ignition Temperature: **Not Established**	Special Fire & Explosion Hazards: **None Known**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Effects of Overexposure:
Not Established

Acute:
Due to physical nature of this product, eye contact, ingestion and inhalation are unlikely.

Chronic:
No known adverse effects.

Signs and Symptoms of Exposure:
Treat as a foreign object in eye. Eye contact may cause severe eye irritation, redness, tearing and blurred vision. Flush with large amounts of water. Get medical attention if irritation of eyes or skin persists.

Chemical Listed as a Carcinogen (or Potential Carcinogen):
National Toxicology Program: **NO**
L.A.R.C. Monographs: **NO**
OSHA: **NO**

Emergency & First Aid Procedures:
Eye Contact:
Contact with eyes may result in tearing, irritation, redness and swelling. Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain.
Skin Contact:
Thoroughly wash affected area with soap and water.
Inhalation:
Due to the physical nature of this product, inhalation is unlikely.
Ingestion:
Due to the physical nature of this product, ingestion is unlikely.
Primary Route of Entry:
Skin contact.

SECTION 6 – REACTIVITY DATA

Stability:
Stable

Incompatibility:
Strong oxidizers, acids, bases.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide, oxides of nitrogen, sulfur dioxide, and partially burned carbon.

Hazardous Polymerization:
NA

Conditions to Avoid:
Open flames, sparks, and closed areas that restrict adequate ventilation. Exposure to temperatures in excess of 130° F

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Shovel or scoop into a sealable container for disposal.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose in a landfill in accordance with local, state and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:
Not required under normal conditions of use.

Eye Protection:
Impervious glasses recommended

Protective Gloves:
Not required under normal conditions of use.

Other Protective Equipment:
Under normal application conditions, protective glasses, gloves, and clothing are adequate.

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:

Store in cool, dry, well ventilated facility. Do not store or handle at temperatures in excess of 130° F. Store and use away from all sources of sparks, direct heat and ignition.

Other Precautions:

Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:

Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 – TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:

September 26, 1990

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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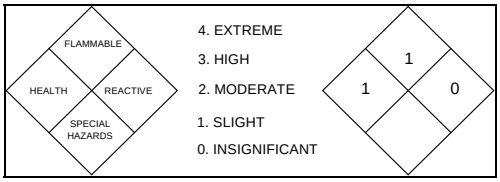
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 102 ROYAL EDGE UNCURED WITH TAPE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Self-Adhering Uncured EPDM Tape Flashing**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **6,and 12 inch Uncured Flashing**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Chemical Name:	Common Name:	CAS#:	% (by wt)	Exposure Limits:
Nonhazardous as per 29 CFR 1910. 1200.	**None**	**None**	**100**	**None Established**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black, solid with no odor**	Physical State: **Solid**	Solubility in Water: **None**
Boiling Point: **NA**	Specific Gravity (HO=1) **1.10**	Melting Point: **Not Established**
Vapor Pressure: **NA**	Vapor Density (Air=1) **Not Established**	Freezing Point: **Not Established**
Percent Volatiles: **0.7 % maximum**	Evaporation Rate: **NA**	Reactivity in Water: **Not Established**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **> 200° C**	Flammable Limits (in air): **NA**
Extinguishing Media: **Dry chemical, carbon dioxide, water fog or foam. Water should be used to keep fire exposed containers cool.**	Fire Fighting Procedures: **Treat as Class "B" Fire.** **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **May form toxic materials: Carbon Dioxide, Carbon Monoxide, Oxide of nitrogen, Sulfur Dioxide, and acrid smoke and irritating fumes.**	
Method Used **Not Established**	
Auto-Ignition Temperature: **Not Established**	Special Fire & Explosion Hazards: **None Known**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Effects of Overexposure:
Not Established

Acute:
Due to physical nature of this product, eye contact, ingestion and inhalation are unlikely.

Chronic:
No known adverse effects.

Signs and Symptoms of Exposure:
Treat as a foreign object in eye. Eye contact may cause severe eye irritation, redness, tearing and blurred vision. Flush with large amounts of water. Get medical attention if irritation of eyes or skin persists.

Chemical Listed as a Carcinogen (or Potential Carcinogen):
National Toxicology Program: **NO**
L.A.R.C. Monographs: **NO**
OSHA: **NO**

Emergency & First Aid Procedures:
Eye Contact:
Contact with eyes may result in tearing, irritation, redness and swelling. Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain.
Skin Contact:
Thoroughly wash affected area with soap and water.
Inhalation:
Due to the physical nature of this product, inhalation is unlikely.
Ingestion:
Due to the physical nature of this product, ingestion is unlikely.
Primary Route of Entry:
Skin contact.

SECTION 6 – REACTIVITY DATA

Stability:
Stable

Incompatibility:
Strong oxidizers, acids, bases.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide, oxides of nitrogen, sulfur dioxide, and partially burned carbon.

Hazardous Polymerization:
NA

Conditions to Avoid:
Open flames, sparks, and closed areas that restrict adequate ventilation. Exposure to temperatures in excess of 130° F

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Shovel or scoop into a sealable container for disposal.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose in a landfill in accordance with local, state and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:
Not required under normal conditions of use.

Eye Protection:
Impervious safety glasses recommended.

Protective Gloves:
Not required under normal conditions of use.

Other Protective Equipment:
Under normal application conditions, protective glasses, gloves, and clothing are adequate.

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Do not store or handle at temperatures in excess of 130° F. Store and use away from all sources of sparks, direct heat and ignition.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 – TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:
September 26, 1990

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9 Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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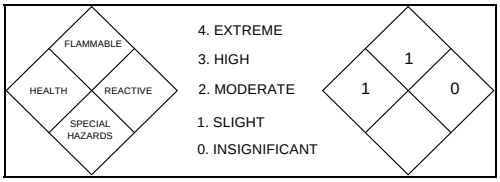
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 103 ROYAL EDGE CURED COVER TAPE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Self-Adhering Cover Strip**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **6, 9, and 12 inch Cured Cover Tape**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Chemical Name:	Common Name:	CAS#:	% (by wt)	Exposure Limits:
Nonhazardous as per 29 CFR 1910. 1200.	**None**	**None**	**100**	**None Established**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black, solid with no odor**	Physical State: **Solid**	Solubility in Water: **None**
Boiling Point: **NA**	Specific Gravity (HO=1) **0.97**	Melting Point: **Not Established**
Vapor Pressure: **NA**	Vapor Density (Air=1) **Not Established**	Freezing Point: **Not Established**
Percent Volatiles: **0.7 % maximum**	Evaporation Rate: **NA**	Reactivity in Water: **Not Established**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **> 200° C**	Flammable Limits (in air): **NA**
Extinguishing Media: **Dry chemical, carbon dioxide, water fog or foam. Water should be used to keep fire exposed containers cool.**	Fire Fighting Procedures: **Treat as Class "B" Fire.** **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxide of nitrogen, Sulfur Dioxide, and acrid smoke and irritating fumes.**	
Method Used **Not Established**	
Auto-Ignition Temperature: **Not Established**	Special Fire & Explosion Hazards: **None Known**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Effects of Overexposure:
Not Established

Signs and Symptoms of Exposure:
Treat as a foreign object in eye. Eye contact may cause severe eye irritation, redness, tearing and blurred vision. Flush with large amounts of water. Get medical attention if irritation of eyes or skin persists.

Acute:
Not Established

Chronic:
No known adverse effects.

Chemical Listed as a Carcinogen (or Potential Carcinogen):
National Toxicology Program: **NO**
L.A.R.C. Monographs: **NO**
OSHA: **NO**

Emergency & First Aid Procedures:
Eye Contact:
Contact with eyes may result in tearing, irritation, redness and swelling. Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain.
Skin Contact:
Thoroughly wash affected area with soap and water.
Inhalation:
Due to the physical nature of this product, inhalation is unlikely.
Ingestion:
Due to the physical nature of this product, ingestion is unlikely.
Primary Route of Entry:
Skin contact.

SECTION 6 – REACTIVITY DATA

Stability:
Stable

Incompatibility:
Strong oxidizers, acids, bases.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide, oxides of nitrogen, sulfur dioxide, and partially burned carbon.

Hazardous Polymerization:
NA

Conditions to Avoid:
Open flames, sparks, and closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Shovel or scoop into a sealable container for disposal.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose in a landfill in accordance with local, state and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:
Not required under normal conditions of use.

Eye Protection:
Impervious glasses recommended

Protective Gloves:
Not required under normal conditions of use.

Other Protective Equipment:
Under normal application conditions, protective glasses, gloves, and clothing are adequate.

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:

Store in cool, dry, well ventilated facility. Do not store or handle at temperatures in excess of 130° F. Store and use away from all sources of sparks, direct heat and ignition.

Other Precautions:

Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:

Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

August 2000

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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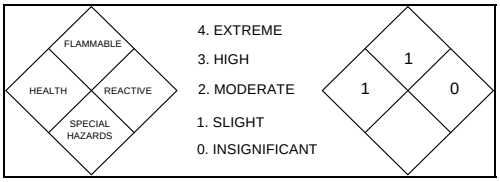
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 104 ROYAL EDGE SEAM TAPE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Seam Tape**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **3, 4, and 7 inch Splice Tape**	Manufacturer's Name: **Roofing Products International, Inc.**
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Chemical Name:	Common Name:	CAS#:	% (by wt)	Exposure Limits:
Nonhazardous as per 29 CFR 1910. 1200.	**None**	**None**	**100**	**None Established**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black, solid with no odor**	Physical State: **Solid**	Solubility in Water: **Insoluble**
Boiling Point: **NA**	Specific Gravity (HO=1) **.97 @ 77° F/25° C**	Melting Point: **Not Established**
Vapor Pressure: **NA**	Vapor Density (Air=1) **Not Established**	Freezing Point: **Not Established**
Percent Volatiles: **0.7 % maximum**	Evaporation Rate: **NA**	Reactivity in Water: **Not Established**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **> 200° C**	Flammable Limits (in air): **NA**
Extinguishing Media: **Dry chemical, carbon dioxide, water fog or foam. Water should be used to keep fire exposed containers cool.**	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxide of nitrogen, Sulfur Dioxide, and acrid smoke and irritating fumes.**	Special Fire & Explosion Hazards: **None Known**
Method Used: **Estimate based on the flash point of the most volatile component.**	Auto-Ignition Temperature: **Not Established**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Treat as a foreign object in eye. Eye contact may cause severe eye irritation, redness, tearing and blurred vision. Flush with large amounts of water. Get medical attention of irritation of eyes or skin persists. Prolonged skin contact may cause irritation, dermatitis and drying of the skin.**
Effects of Overexposure: **Medical Conditions Aggravated By Exposure.** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.**	
Acute: **Irritation from possible allergic skin reaction.**	Chemical Listed as a Carcinogen (or Potential Carcinogen): National Toxicology Program: **NO** L.A.R.C. Monographs: **NO** OSHA: **NO**
Chronic: **No known adverse effects.**	

Emergency & First Aid Procedures:

Eye Contact:

Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain. Call physician

Skin Contact:

Thoroughly wash affected area with soap and water.

Inhalation:

Due to the physical nature of this product, inhalation is unlikely.

Ingestion:

Due to the physical nature of this product, ingestion is unlikely.

Primary Route of Entry:

Skin contact.

SECTION 6 – REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures**	Incompatibility: **Strong oxidizers, acids, bases.**
Hazardous Decomposition Products: **Carbon dioxide and carbon monoxide, oxides of nitrogen, sulfur dioxide, and partially burned carbon.**	Hazardous Polymerization: **NA**

Conditions to Avoid:
Open flames, sparks, and closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Shovel or scoop into a sealable container for disposal.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose in a landfill in accordance with local, state and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **In areas with inadequate ventilation, the use of a NIOSH-Certified respiratory protection for organic vapor is recommended.**	Eye Protection: **Impervious glasses recommended**
Protective Gloves: **Polyvinyl alcohol, nitrile rubber, or neoprene gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Do not store or handle at temperatures in excess of 130° F. Store and use away from all sources of sparks, direct heat and ignition.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Regulated**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

August 2000

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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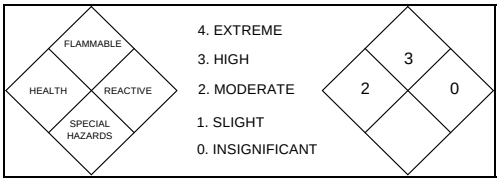
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 105 ROYAL EDGE SEAM TAPE PRIMER



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Primer (Seam Tape)**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Butyl Rubber Adhesive**	Manufacturer's Name: **Roofing Products International, Inc.**
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	OSHA STEL	OSHA PEL	ACGIH TLV
Heptane		**142-82-5**	**TLV 500 PPM**	**500PPM**	**400PPM**
Toluene		**108-88-3**	**Ceiling 300PPM**	**200PPM**	**osha tlv 50PPM**
Methyl Alcohol		**67-56-1**	**ACGIH 250PPM**	**200PPM**	**200PPM**
Nonhazardous as per 29 CFR 1910. 1200.		**None**	**None Established**		

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Thin clear liquid, aliphatic odor**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **151° – 284° F**	Specific Gravity (HO=1) **0.793 (Water=1)**	Melting Point: **NA**
Vapor Pressure: **36 mm Hg@ 20° C**	Vapor Density (Air=1) **3.0-3.7**	Freezing Point: **Not Established**
Percent Volatiles: **83 %**	Evaporation Rate: **Unknown**	Reactivity in Water: **Not Established**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point:
25° F TCC

Flammable Limits (in air):
LEL: 1.1%; UEL: 7%

Extinguishing Media:
Dry chemical, carbon dioxide, water fog or foam. Water should be used to keep fire exposed containers cool.

Fire Fighting Procedures:
Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.
Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.

Hazardous Decomposition Products:
Carbon Dioxide, Carbon Monoxide, acrid smoke and irritating fumes.

Method Used:
Estimate based on the flash point of the most volatile component.

Special Fire & Explosion Hazards:
Flammable liquid. Vapors are heavier than air and can flow along surfaces to ignition sources and flash-back. Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.

Auto-Ignition Temperature:
Not Established

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Signs and Symptoms of Exposure:
Eye contact may cause severe eye irritation, redness, tearing and blurred vision. Prolonged skin contact may cause irritation, dermatitis and drying of the skin. Other symptoms are dizziness, nausea or vomiting. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors. Inhalation may cause repiratory system irritation and central nervous system depression (Narcosis) fatigue. May cause unconsciousness if exposure is excessive. Brief (4 minutes) exposures to heptane at concentrations above 5000 ppm produce nausea, loss of appetite, and a gasoline-like taste that might persist hours after exposure.

Effects of Overexposure:
Medical Conditions Aggravated By Exposure.
Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.

Acute:
Irritation to eyes, lungs, and mucous membranes

Chronic:
Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage.

Chemical Listed as a Carcinogen (or Potential Carcinogen):
National Toxicology Program: **NO**
L.A.R.C. Monographs: **NO**
OSHA: **NO**

Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
>**8 ML/KG (Rat)**	**>4 ML/KG (Rat)**	**3400 PPM/4H (Rat)**

Emergency & First Aid Procedures:
Eye Contact:
Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain. Call physician
Skin Contact:
Clean with rubbing alcohol, followed immediately by washing affected area with soap and water.
Inhalation:
Remove to fresh uncontaminated air. Administer oxygen or artificial respiration, if necessary. Call physician.
Ingestion:
Consult a Physician. DO NOT INDUCE VOMITING
Primary Route of Entry:
Inhalation, skin absorption.

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable at ambient temperatures and pressures	**Strong oxidizers, acids, bases.**
Hazardous Decomposition Products:	Hazardous Polymerization:
Partial combustion may release toxic gases or vapors, such as oxides of carbon and nitrogen along with traces of HCL.	**NA**

Conditions to Avoid:

Open flames, sparks, and closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Shut off and eliminate all ignition sources. Recover released product using inert materials such as sand, earth, or other suitable materials. Minimize skin contact. Use non-sparking tools. Ventilate confined spaces. Keep product clear of sewers, water, or extensive land areas. Assure conformity with applicable government regulations. Transfer into secure containers for proper disposal. Avoid static electricity build-up by grounding a fixed equipment and transfer containers. Use personal protective equipment as outlined below.

Large Spill:

Same as small spill.

Waste Disposal Method:

Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21(a) (1) Ignitability: D001

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
In areas with inadequate ventilation, the use of a NIOSH-Certified respiratory protection for organic vapor is recommended.	**Impervious glasses recommended**
Protective Gloves:	Other Protective Equipment:
Polyvinyl alcohol, nitrile rubber, or neoprene gloves are recommended to prevent skin contact.	**Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:

Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:

Store in cool, dry, well ventilated facility. Store and use away from all sources of sparks, direct heat and ignition. Keep containers closed when not in use. Vapors of this material are heavier than air and will collect in low or confined areas. Empty containers can contain explosive vapors. Bond and ground all fixed and transfer equipment.

Other Precautions:

Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:

Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT**	Identification Number: **UN1133**
Proper Shipping Name: **Adhesive**	Labels Required: **Flammable Liquid**
Hazard Classification: **3**	Other Requirements: **None Known**

Packing Group:

11

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

August 2000

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9 Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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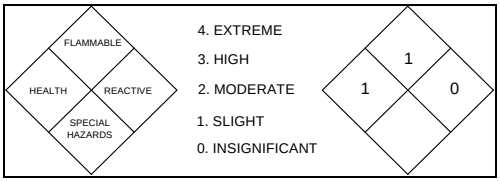
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 106 ROYAL EDGE PIPE BOOT



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Pipe Boot**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **EPDM Pipe Flashing, 1" to 6" ID**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% wt or % vol	OSHA STEL	OSHA PEL	ACGIH TLV
		None	**100**			

This material is a fully vulcanized rubber sheet which falls under the article exemption provided for under OSHA 1910.1200. There are no recognized hazards associated with normal use of this product.

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Tacky black, conical shape with slight rubber odor.**	Physical State: **Solid**	Solubility in Water: **Insoluble**
Boiling Point: **None**	Specific Gravity (Water=1) **0.97**	Melting Point: **Unknown**
Vapor Pressure: **NA**	Vapor Density (Air=1) **NA**	Freezing Point: **NA**
Percent Volatiles: **0.7%**	Evaporation Rate: **NA**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **>200°C**	Flammable Limits (in air): **LEL: None UEL: None**
Extinguishing Media: **Carbon Dioxide, foam, sand/earth. Dry chemical and foam can also be used**.	Fire Fighting Procedures: **Treat as Class "B" fire. Limit firefighting to those trained to do so. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.**	Special Fire & Explosion Hazards: **Oil "bleeds" from material when burning**.

Method Used:	Auto-Ignition Temperature:
Estimate based on the flash point of the most volatile component.	**Unknown**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:	Signs and Symptoms of Exposure:
Not Established	**Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors**.
Effects of Overexposure: **Medical Conditions Aggravated By Exposure** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions**.	
Acute: **Not Established**	Carcinogenicity: **IARC, NTP, and OSHA do not list this product as a carcinogen**.
Chronic: **No known adverse effects.**	

Emergency & First Aid Procedures:

Eye Contact:

Treat as object in eye. Flush with clean water. Contact Physician if irritation persists.

Skin Contact:

Physical form should preclude and harmful effect from contact.

Inhalation:

NA

Ingestion:

Consult a Physician

Primary Route of Entry:

None

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable	**Not Established**
Hazardous Decomposition Products: **Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released during a fire.**	Hazardous Polymerization: **Will not occur**

Conditions to Avoid:

Open flames, heat and sparks. Exposure to temperature in excess of 130°F.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Scoop or shovel material into sealed containers.

Large Spill:

Same as small spill.

Waste Disposal Method:

Dispose of in accordance with local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **NA**	Eye Protection: **Safety glasses recommended.**
Protective Gloves: **Gloves are recommended to prevent skin contact.**	Other Protective Equipment: **None required under normal installation conditions.**

Ventilation:
Store and use in well ventilated areas.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility.

Other Precautions:
Store material in original shipping packaging.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:
November 1992

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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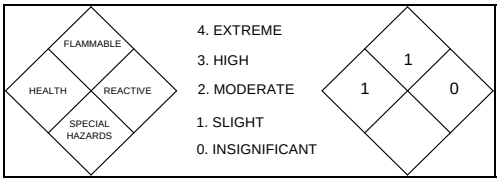
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 107 ROYAL EDGE PIPE BOOT WITH TAPE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Pipe Boot with Tape**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **EPDM Pipe Flashing with Tape, 1" to 6" ID**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% wt or % vol	OSHA STEL	OSHA PEL	ACGIH TLV
		None	**100**			

This material is a fully vulcanized rubber sheet which falls under the article exemption provided for under OSHA 1910.1200. There are no recognized hazards associated with normal use of this product.

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Tacky black, conical shape with slight rubber odor.**	Physical State: **Solid**	Solubility in Water: **Insoluble**
Boiling Point: **None**	Specific Gravity (Water=1) **0.97**	Melting Point: **Unknown**
Vapor Pressure: **NA**	Vapor Density (Air=1) **NA**	Freezing Point: **NA**
Percent Volatiles: **0.7%**	Evaporation Rate: **NA**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **>200°C**	Flammable Limits (in air): **LEL: None UEL: None**
Extinguishing Media: **Carbon Dioxide, foam, sand/earth. Dry chemical and foam can also be used**.	Fire Fighting Procedures: **Treat as Class "B" fire. Limit firefighting to those trained to do so. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.**	Special Fire & Explosion Hazards: **Oil "bleeds" from material when burning**.

Method Used:	Auto-Ignition Temperature:
Estimate based on the flash point of the most volatile component.	**Unknown**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:	Signs and Symptoms of Exposure:
Not Established	**Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors**.
Effects of Overexposure: **Medical Conditions Aggravated By Exposure** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions**.	
Acute: **Not Established**	Carcinogenicity: **IARC, NTP, and OSHA do not list this product as a carcinogen**.
Chronic: **No known adverse effects.**	

Emergency & First Aid Procedures:

Eye Contact:

Treat as object in eye. Flush with clean water. Contact Physician if irritation persists.

Skin Contact:

Physical form should preclude and harmful effect from contact.

Inhalation:

NA

Ingestion:

Consult a Physician

Primary Route of Entry:

None

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable	**Not Established**
Hazardous Decomposition Products: **Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released during a fire.**	Hazardous Polymerization: **Will not occur**

Conditions to Avoid:

Open flames, heat and sparks. Exposure to temperature in excess of 130°F.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Scoop or shovel material into sealed containers.

Large Spill:

Same as small spill.

Waste Disposal Method:

Dispose of in accordance with local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **NA**	Eye Protection: **Safety glasses recommended.**
Protective Gloves: **Gloves are recommended to prevent skin contact.**	Other Protective Equipment: **None required under normal installation conditions.**

Ventilation:
Store and use in well ventilated areas.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility.

Other Precautions:
Store material in original shipping packaging.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:
November 1992

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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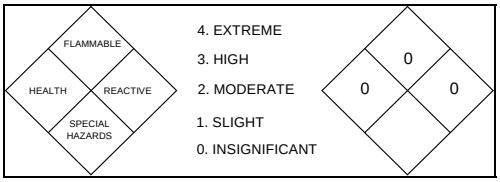
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 108 ROYAL EDGE REINFORCED PERIMETER MEMBRANE STRIP WITH TAPE



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Reinforced Perimeter Membrane Strip With Tape**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Reinforced Perimeter Membrane Strip, Reinforced Perimeter Membrane Strip/Tape**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% wt or % vol	OSHA STEL	OSHA PEL	ACGIH TLV
Nonhazardous as per 29 CFR 1910. 1200		**None**	**100%**		**None Established**	

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Rubber Sheet-mild odor**	Physical State: **Solid**	Solubility in Water: **Insoluble**
Boiling Point: **NA**	Specific Gravity (Water=1) **0.98 ± .02[1]** **1.15 ± .05[2]**	Melting Point: **Unknown**
Vapor Pressure: **NA**	Vapor Density (Air=1) **NA**	Freezing Point: **NA**
Percent Volatiles: **0.7% Maximum**	Evaporation Rate: **NA**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Components: **Reinforced Perimeter Membrane Strip: EPDM** **Reinforced Perimeter Membrane Strip With Tape: EPDM, Seam Tape**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **>200° C**	Flammable Limits (in air): **Not Established**
Extinguishing Media: **Carbon Dioxide, foam, sand/earth. Dry chemical and water can also be used**.	Fire Fighting Procedures: **Treat as Class "B" fire. Limit fire fighting to those trained to do so. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.**	Special Fire & Explosion Hazards: **None Known**
Method Used: **Estimate based on the flash point of the most volatile component.**	Auto-Ignition Temperature: **Unknown**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors**.
Effects of Overexposure: **Medical Conditions Aggravated By Exposure.** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions**.	
Acute: **Not Established**	Carcinogenicity: **IARC, NTP, and OSHA do not list this product as a carcinogen**.
Chronic: **No known adverse effects.**	

Emergency & First Aid Procedures:

Eye Contact:

Flush eye with clean water. Contact physician if irritation persists.

Skin Contact:

Physical form should preclude and harmful effect from contact.

Inhalation:

NA

Ingestion:

Consult a Physician

Primary Route of Entry:

None

SECTION 6 – REACTIVITY DATA

Stability: **Stable**	Incompatibility: **Not Established**
Hazardous Decomposition Products: **Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released during a fire.**	Hazardous Polymerization: **Will not occur**

Conditions to Avoid:
Open flames, heat and sparks.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Scoop or shovel material into sealed containers.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of in accordance with local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **NA**	Eye Protection: **Safety glasses recommended.**
Protective Gloves: **Gloves are recommended to prevent skin contact.**	Other Protective Equipment: **None required under normal installation conditions.**

Ventilation:
Store indoors in unopened containers at temperatures between 60° F and 80° F. Use in well ventilated areas.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility.

Other Precautions:
Store material in original shipping packaging.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:

Supersedes previous MSDS

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

DISCLAIMER

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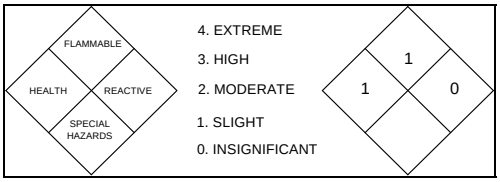
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 109 ROYAL EDGE WALKWAY PAD



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **RPI Walkway Pad**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Cured rubber material with Adhesive Tape**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 0, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% wt or % vol	OSHA STEL	OSHA PEL	ACGIH TLV
Nonhazardous as per 29 CFR 1910. 1200		**None**	**100%**		**None Established**	

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black solid with rubber odor**	Physical State: **Solid**	Solubility in Water: **Insoluble**
Boiling Point: **None**	Specific Gravity (Water=1) **1.18**	Melting Point: **Unknown**
Vapor Pressure: **NA**	Vapor Density (Air=1) **NA**	Freezing Point: **NA**
Percent Volatiles: **Unknown**	Evaporation Rate: **NA**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Percent Solids (by weight): **100%**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **NA**	Flammable Limits (in air): **Not Established**
Extinguishing Media: **Carbon Dioxide, foam, sand/earth. Dry chemical and water can also be used**.	Fire Fighting Procedures: **Limit fire fighting to those trained to do so. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.**	Special Fire & Explosion Hazards: **Oil "bleeds" from material when burning.**
Method Used: **NA**	Auto-Ignition Temperature: **Unknown**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Effects of Overexposure:
Medical Conditions Aggravated By Exposure.
Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.

Signs and Symptoms of Exposure:
Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals.

Acute:
Not Established

Chronic:
No known adverse effects.

Carcinogenicity:
IARC, NTP, and OSHA do not list this product as a carcinogen.

Emergency & First Aid Procedures:
Eye Contact:
Treat as foreign object in eye. Flush eye with clean water. Contact physician if irritation persists.
Skin Contact:
Physical form should preclude and harmful effect from contact.
Inhalation:
NA
Ingestion:
Consult a Physician
Primary Route of Entry:
None

SECTION 6 – REACTIVITY DATA

Stability:
Stable

Incompatibility:
Not Established

Hazardous Decomposition Products:
Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released during a fire.

Hazardous Polymerization:
Will not occur

Conditions to Avoid:
Open flames, heat and sparks.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Scoop or shovel material into sealed containers.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of in accordance with local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **NA**	Eye Protection: **Safety glasses recommended.**
Protective Gloves: **Gloves are recommended to prevent skin contact.**	Other Protective Equipment: **None required under normal installation conditions.**

Ventilation:
Store indoors in well ventilated area in unopened containers away from heat, sparks, and open flames. Use in well ventilated areas.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility.

Other Precautions:
Store material in original shipping packaging.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
This product is considered to be a finished article as per 29 CFR 1910.1200 © and is therefore exempt from the requirements of the Hazard Communication standard.

Date of Previous MSDS:
Supersedes all previous Walkway Pad MSDS

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9 Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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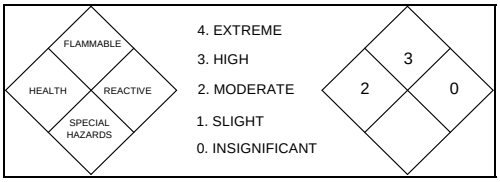
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 110 ROYAL EDGE LAP CAULK



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Lap Caulk**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Paste Sealant**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	Common Name	Case No.	% wt or % vol	Exposure Limits:
Aliphatic Petroleum Distillates	**Naptha**	**64742-47-8**	**15-20%**	**PEL 500 ppm** **TLV 300 ppm (based on TLV for VM&P Naptha)**
Silica, Crystalline, Quartz	**Rose Quartz, Sand**	**14808-60-7**	**<1**	**PEL**(Respirable) **$\frac{10\ mg/m^3}{(\%SiO_2 + 2)}$** **TLV**(Resirable) **0.025 mg/m³**
Non-hazardous as per 29 CFR 1910.1200	**None**	**EPA TSCA Registered**	**<82**	**None Established**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black viscous paste, aliphatic odor**	Physical State: **Paste**	Solubility in Water: **<0.5%**
Boiling Point: **240°F**	Specific Gravity (Water=1) **1.4**	Melting Point: **NA**
Vapor Pressure: **45mm Hg @78°C**	Vapor Density (Air=1) **3.8 (Air=1)**	Freezing Point: **Not Established**
Percent Volatiles: **15-20%**	Evaporation Rate: **9.2 (Ethyl Ether=1)**	Reactivity in Water: **NA**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **52°F (11°C)**	Flammable Limits (in air) **LEL 0.9%** **UEL 6.7%**

Extinguishing Media:	Fire Fighting Procedures:
Carbon Dioxide, foam, sand/earth. Dry chemical and foam can also be used. Do not use direct stream of water. Product will float and re-ignite on surface.	**Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved. Use water spray to cool adjacent surfaces and fire-exposed containers only. Protect against inhalation of combustion products.**
Method Used: **TCC**	Auto-Ignition Temperature: **Unknown**
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, and Sulfur Dioxide.**	Special Fire & Explosion Hazards: **Cool heated containers with water stream. Keep away from open flames and sparks. Heated containers may may explode. Fumes may collect in low areas and ignite.**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:	Signs and Symptoms of Exposure:
Not Established	**Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors. Eye contact may cause irritation, redness, tearing and blurred vision. Prolonged contact may cause dermatitis and drying of the skin.**
Effects of Overexposure: **Pre-existing lung, skin, eye, pulmonary or nervous conditions, may be aggravated by exposure to this product. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.**	
Acute: **Inhalation may cause repiratory system irritation and central nervous system depression characterized by headache, dizziness, muscular weakness and fatigue. May cause unconsciousness if exposure is excessive.**	Carcinogenicity: **Silica, Crystalline Quartz is classified as known to be a human carcinogen by NTP and an IARC Class 1 Carcinogen.**

Emergency & First Aid Procedures:

Eye Contact: **Flush with water for 15 minutes. Contact physician.**

Skin Contact:

Clean with rubbing alcohol followed immediately by washing with soap and water.

Inhalation:

Remove to fresh air and administer oxygen if breathing is labored. Give artificial respiration is breathing is stopped. Seek immediate medical attention if oxygen or artificial respiration is administered.

Ingestion:

Do not induce vomiting. Consult and inform a physician of the incident and the type and nature of the material.

Primary Route of Entry:

Inhalation, skin.

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable at ambient temperatures and pressures.	**Strong oxidizers, acids and bases.**
Hazardous Decomposition Products:	Hazardous Polymerization:
Toxic gases or vapors, such as carbon monoxide, carbon dioxide and other decomposition products may be released during a fire.	**Will not occur**

Conditions to Avoid:

Open flames, sparks, static electricity, and welding arcs.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Remove ignition sources. Absorb on inert material. Use non-sparking tools, scoop or shovel material into secure containers proper disposal. Use personal protective equipment as outlined below.

Large Spill:

Same as small spill.

Waste Disposal Method:

As a hazardous waste in accordance with EPA/RCRA regulations 40 CFR 261.21 (a) (1). Ignitablility: D001.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
Approved OSHA organic vapor mask.	**Safety glasses recommended.**
Protective Gloves:	Other Protective Equipment:
Impervious gloves are recommended to prevent skin contact. Neoprene, Viton.	**None required under normal installation conditions.**

Ventilation:

Store and use in well ventilated areas. **Anticipated use for outdoors only. Local exhaust ventilation is recommended to minimize any vapor exposure.**

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:

Store in cool, dry, well ventilated facility. **Use away from all sources of direct heat and ignition. Keep containers closed when not in use.**

Other Precautions:

Store material in original shipping packaging.

Work/Hygienic Practices:

Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT, IMO**	Identification Number: **UN1133**
Proper Shipping Name: **Adhesives**	Labels Required: **Flammable Liquid**
Hazard Classification: **3**	Other Requirements: **49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174 Flash Point 11°C.**
Packing Group: **11**	

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

Under conditions of normal use, the crystalline silica contained in this product is a completely incorporated component, and therefore, should not represent an inhalation hazard.

Date of Previous MSDS:

August 2000

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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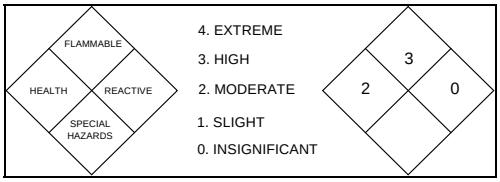
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 111 ROYAL EDGE WATER CUT-OFF MASTIC



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Water Cut-Off Mastic**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **None**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **NA**	NFPA Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	Common Name	Case No.	% wt or % vol	OSHA STEL	OSHA PEL	ACGIH TLV
Heptane	**None**	**142-82-5**	**14**	**500PPM**	**500PPM**	**400PPM**
Calcium Carbonate	**Limestone**	**1317-65-3**	**<3**		**5 mg/m³** (Respirable) **15 mg/m³** (Total)	**2 mg/m³** (Respirable)
Kaolin	**Clay**	**1332-58-7**	**>3**		**5 mg/m³** (Repsirable) **15 mg/m³** (Total)	**2 mg/m³** (Respirable)
Non-hazardous as per 29 CFR 1910.1200	**None**	**EPA TSCA**	**<82**		**None Established**	

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Grey viscous paste, aliphatic odor**	Physical State: **Paste**	Solubility in Water: **Insoluble**
Boiling Point: **200°F**	Specific Gravity (Water=1) **1.33**	Melting Point: **NA**
Vapor Pressure: **45mm Hg @20°C**	Vapor Density (Air=1) **3.4 (Air=1)**	Freezing Point: **Not Established**
Percent Volatiles: **25.5%**	Evaporation Rate: **4.5 (Butyl Acetate=1)**	Reactivity in Water: **NA**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **14°F**	Flammable Limits (in air) **LEL 1.0%** **UEL 7.0%**
Extinguishing Media: **Carbon Dioxide, foam, sand/earth. Dry chemical and foam can also be used. Do not use direct stream of water. Product will float and re-ignite on surface.**	Fire Fighting Procedures: **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke d decomposition products. Toxic fumes and vapors may be involved. Use water spray to cool adjacent surfaces and fire-exposed containers only. Protect against inhalation of combustion products.**
Method Used: **TCC**	Auto-Ignition Temperature: **Unknown**
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, and Sulfur Dioxide.**	Special Fire & Explosion Hazards: **Cool heated containers with water stream. Keep away from open flames and sparks. Heated containers may explode. Fumes may settle in low areas and explode.**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors. Eye contact may cause irritation, redness, tearing and blurred vision. Prolonged contact may cause dermatitis and drying of the skin.**
Effects of Overexposure: **Pre-existing lung, skin, eye, pulmonary or nervous conditions, may be aggravated by exposure to this product. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.**	
Acute: **Inhalation may cause repiratory system irritation and central nervous system depression characterized by headache, dizziness, muscular weakness and fatigue. May cause unconsciousness if exposure is excessive.**	Carcinogenicity: **Silica, Crystalline Quartz is classified as known to be a human carcinogen by NTP and an IARC Class 1 Carcinogen.**

Emergency & First Aid Procedures:

Eye Contact: **Flush with water for 15 minutes. Contact physician.**

Skin Contact:

Clean with rubbing alcohol followed immediately by washing with soap and water.

Inhalation:

Remove to fresh air and administer oxygen if breathing is labored. Give artificial respiration is breathing is stopped. Seek immediate medical attention if oxygen or artificial respiration is administered.

Ingestion:

Do not induce vomiting. Consult and inform a physician of the incident and the type and nature of the material.

Primary Route of Entry:

Inhalation, skin.

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable at ambient temperatures and pressures.	**Strong oxidizers, acids and bases.**
Hazardous Decomposition Products:	Hazardous Polymerization:
Toxic gases or vapors, such as carbon monoxide, carbon dioxide and other decomposition products may be released during a fire.	**Will not occur**

Conditions to Avoid:

Open flames, sparks, static electricity, and welding arcs.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Remove ignition sources. Absorb on inert material. Use non-sparking tools, scoop or shovel material into secure containers proper disposal. Use personal protective equipment as outlined below.

Large Spill:

Same as small spill.

Waste Disposal Method:

As a hazardous waste in accordance with EPA/RCRA regulations 40 CFR 261.21 (a) (1). Ignitablility: D001.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
Approved OSHA organic vapor mask.	**Safety glasses recommended.**
Protective Gloves:	Other Protective Equipment:
Impervious gloves are recommended to prevent skin contact. Neoprene, Viton.	**None required under normal installation conditions.**

Ventilation:

Store and use in well ventilated areas. **Anticipated use for outdoors only. Local exhaust ventilation is recommended to minimize any vapor exposure.**

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Store material in original shipping packaging.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT, IMO**	Identification Number: **UN1133**
Proper Shipping Name: **Adhesives**	Labels Required: **Flammable Liquid**
Hazard Classification: **3**	Other Requirements: **49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174 Flash Point 11°C.**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
Under conditions of normal use, the crystalline silica contained in this product is a completely incorporated component, and therefore, should not represent an inhalation hazard.

Date of Previous MSDS:
August 2000

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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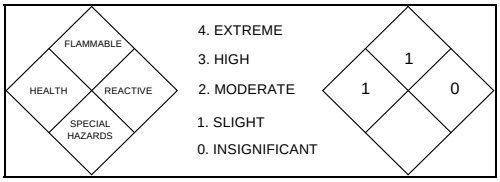
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 112 ROYAL EDGE POURABLE SEALER PART A



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Pourable Sealer Part A**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Polymethylene Polyisocyanate**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Polyisocyanate (Polymeric MDI)**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	Common Name:	CAS #:	% (by weight)	Exposure Limits:
Methylenediphenyl Diisocyanate	**MDI**	**101-68-8**	**41.7**	**OSHA CEIL 0.02 PPM** **TLV 0.005 PPM**
Carbon Black	**Channel Black**	**1333-86-4**	**16.6**	**PEL 3.5 mg/M³** **TLV 3.5 mg/M³**
MDI Oligomers	**None**	**9016-87-9**	**41.7**	**Not Established**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Light black, viscous liquid, mild odor.**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **341°**	Specific Gravity (HO=1) **1.474(Water=1)**	Melting Point: **Not Applicable**
Vapor Pressure: **<0.0001 mm Hg @ 20° C**	Vapor Density (Air=1) **8.6**	Freezing Point: **Not Established**
Percent Volatiles: **Unknown**	Evaporation Rate: **Unknown**	Reactivity in Water: **Reacts with water.**
pH (Full Strength) **Unknown**	pH (Recommended Dilution): **Unknown**	Ignition Temperature: **400°C (725°F)**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **111°C (232°F)**	Flammable Limits (in air): **LEL: Unknown UEL: Unknown**
Extinguishing Media: **Water fog, foam, CO_2, or dry chemical.**	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **No Decomposition if used according to specifications.**	Special Fire & Explosion Hazards: **Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity. Heat from fire can generate flammable vapors. Avoid contamination with moisture, alcohol, ammonia, amines, and alkalies that react with Isocyanates. Will react vigorously with water.**
Method Used: **COC**	Auto-Ignition Temperature: **Product in not self-igniting.**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Eye contact may result in conjunctival irritation and mild corneal opacity. Skin contact may result in irritative or allergic dermatitis. Inhalation of vapors may cause irritation of the mucous membrane of the nose, throat, or trachea, shortness of breath, chest discomfort, difficulty breathing and reduced pulmonary function. Exposure of fumes above the PEL may result in eye irritation, headache, chemical bronchitis, asthma-like symptoms or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonitis, characterized by flu-like symptoms, the onset of which may be delayed. Neurologic effects after exposure to high levels of Diisocyanates can include euphoria, anxiety, personality changes, memory defictits, depression or paranoia. Aerosol MDI LC_{50}: 490 mg/M^3, rat: MDI LD_{50}: > 10,000 mg/kg, rat.**
Effects of Overexposure: **May cause minor temporary eye or respiratory system irritation. May cause skin irritation when contact is made with skin area that is cut or scratched.**	
Acute: **None Known**	Chemical Listed as a Carcinogen (or Potential Carcinogen): **Carbon black is an IARC class 2B Carcinogen and is possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.**
Chronic: **Acute or chronic overexposure to Isocyanates may cause sensitization resulting in allergic symptoms of the lower respiratory tract, including shortness of breath**	

and difficulty in breathing. Asthma caused by Isocyanates including MDI, may persist after removal from exposure and may be irreversible. Long term exposure to Isocyanates has been reported to cause lung damage, including reduces lung function, which may be permanent.	

Emergency & First Aid Procedures:

Eye Contact:

Flush with gentle stream of water for a minimum of 15 minutes and contact a physician.

Skin Contact:

Clean with rubbing alcohol, followed by soap and water. When skin contact is made with a mixture of Parts A & B, the product must be removed immediately using Acetone.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

Consult a Physician. DO NOT INDUCE VOMITING. Inform the physician of the nature of the product.

Primary Route of Entry:

Inhalation.

SECTION 6 – REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures.**	Incompatibility: **Strong oxidizers, acids, bases, and moisture.**
Hazardous Decomposition Products: **Toxic gases or vapors, such as oxides of carbon and nitrogen along with traces of butadiene may be released during a fire.**	Hazardous Polymerization: **Will not occur.**

Conditions to Avoid:

Strong oxidizers, moisture, acid and bases. Contact with phosphorus may produce by-products.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Wear protective equipment including eye protection, rubber gloves, rubber boots, and self-contained breathing apparatus in the pressure mode, or an air supplied respirator. Absorb using inert material. Use non-sparking tools. Transfer into secure DOT approved waste containers for proper disposal. Use personal protective equipment as outlined below.

Large Spill:

Same as small spill.

Waste Disposal Method:

Dispose of according to local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **Use NIOSH-Certified respiratory protection for organic vapor if necessary.**	Eye Protection: **Impervious safety glasses are recommended.**
Protective Gloves: **Impervious gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:

Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water immediately after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Applicable**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

Packing Group:
Not Applicable

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

Date of Previous MSDS:
August 2000

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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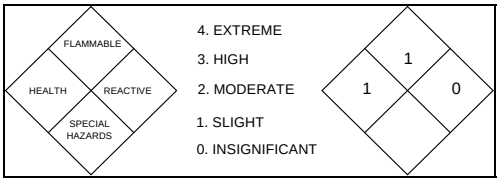
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 113 ROYAL EDGE POURABLE SEALER PART B



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Pourable Sealer Part B**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Polymethylene Polyisocyanate**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Polyisocyanate (Polymeric MDI)**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0** HMIS Acute Hazard Rating: **Health 1, Flammability 1, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	Common Name:	CAS #:	% (by weight)	Exposure Limits:
Methylenediphenyl Diisocyanate	**MDI**	**101-68-8**	**41.7**	**OSHA CEIL 0.02 PPM** **TLV 0.005 PPM**
Carbon Black	**Channel Black**	**1333-86-4**	**16.6**	**PEL 3.5 mg/M³** **TLV 3.5 mg/M³**
MDI Oligomers	**None**	**9016-87-9**	**41.7**	**Not Established**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Light black, viscous liquid, mild odor.**	Physical State: **Liquid**	Solubility in Water: **Reacts with water**
Boiling Point: **341°**	Specific Gravity (HO=1) **1.474(Water=1)**	Melting Point: **Not Applicable**
Vapor Pressure: **<0.0001 mm Hg @ 20° C**	Vapor Density (Air=1) **8.6**	Freezing Point: **Not Established**
Percent Volatiles: **Unknown**	Evaporation Rate: **Unknown**	Reactivity in Water: **Reacts with water.**
pH (Full Strength) **Unknown**	pH (Recommended Dilution): **Unknown**	Ignition Temperature: **400°C (725°F)**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **111°C (232°F)**	Flammable Limits (in air): **LEL: Unknown UEL: Unknown**
Extinguishing Media: **Water fog, foam, CO_2, or dry chemical.**	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **No Decomposition if used according to specifications.**	Special Fire & Explosion Hazards: **Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity. Heat from fire can generate flammable vapors. Avoid contamination with moisture, alcohol, ammonia, amines, and alkalies that react with Isocyanates. Will react vigorously with water.**
Method Used: **PMCC**	Auto-Ignition Temperature: **Product in not self-igniting.**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Eye contact may result in conjunctival irritation and mild corneal opacity. Skin contact may result in irritative or allergic dermatitis. Inhalation of vapors may cause irritation of the mucous membrane of the nose, throat, or trachea, shortness of breath, chest discomfort, difficulty breathing and reduced pulmonary function. Exposure of fumes above the PEL may result in eye irritation, headache, chemical bronchitis, asthma-like symptoms or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonitis, characterized by flu-like symptoms, the onset of which may be delayed. Neurological effects after exposure to high levels of Diisocyanates can include euphoria, anxiety, personality changes, memory deficits, depression or paranoia. Aerosol MDI LC_{50}: 490 mg/M^3, rat: MDI LD_{50}: > 10,000 mg/kg, rat.**
Effects of Overexposure: **May cause minor temporary eye or respiratory system irritation. May cause skin irritation when contact is made with skin area that is cut or scratched.**	

Acute:
Overexposure to fumes may result in shortness of breath difficulty breathing. Long term exposure may result in permanent lung damage.

Chronic:	Chemical Listed as a Carcinogen (or Potential Carcinogen):
Acute or chronic overexposure to Isocyanates may cause sensitization resulting in allergic symptoms of the lower respiratory tract, including shortness of breath and difficulty in breathing. Asthma caused by Isocyanates including MDI, may persist after removal from exposure and may be irreversible. Long term exposure to Isocyanates has been reported to cause lung damage, including reduces lung function, which may be permanent.	**Carbon black is an IARC class 2B Carcinogen and is possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.**

Emergency & First Aid Procedures:

Eye Contact:

Flush with gentle stream of water for a minimum of 15 minutes and contact a physician.

Skin Contact:

Clean with rubbing alcohol, followed by soap and water. When skin contact is made with a mixture of Parts A & B, the product must be removed immediately using Acetone.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

Consult a Physician. DO NOT INDUCE VOMITING. Inform the physician of the nature of the product.

Primary Route of Entry:

Inhalation, Skin or eye contact, and Ingestion.

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable at ambient temperatures and pressures.	**Strong oxidizers, acids, bases, and moisture.**
Hazardous Decomposition Products:	Hazardous Polymerization:
Toxic gases or vapors, such as oxides of carbon and nitrogen along with traces of butadiene may be released during a fire.	**Will not occur.**

Conditions to Avoid:

Strong oxidizers, moisture, acid and bases. Contact with phosphorus may produce by-products.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Small spill:

Wear protective equipment including eye protection, rubber gloves, rubber boots, and self-contained breathing apparatus in the pressure mode, or an air supplied respirator. Absorb using inert material. Use non-sparking tools. Transfer into secure DOT approved waste containers for proper disposal. Use personal protective equipment as outlined below.

Large Spill:

Same as small spill.

Waste Disposal Method:

Dispose of according to local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **Use NIOSH-Certified chemical cartridge respirator for organic vapors if exposure exceeds PEL or TLV limits.**	Eye Protection: **The use of safety glasses with side shields are recommended when handling this product.**
Protective Gloves: **The use of Nitrile rubber gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate. Clean and dispose of contaminated clothing after each use.**

Ventilation:
Use in a well ventilated area.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water immediately after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Regulated**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

Packing Group:
Not Applicable

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
None

Date of Previous MSDS:
August 2000

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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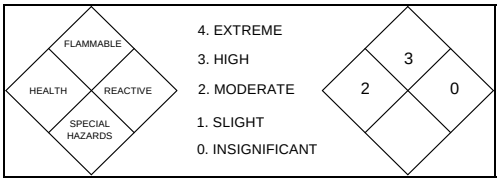
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 114 ROYAL EDGE MEMBRANE CLEANER



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Membrane Cleaner**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Solvent Naphtha (Petroleum), Light Aliphatic**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Hydrocarbon Solvent**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% (by weight)	Exposure Limits:
Aliphatic Petroleum Distillates	**Naptha**	**64742-89-8**	**100**	**Pel 500 ppm** **TLV 300 ppm** **(based on TLV for VM & P Naptha).**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Thin clear liquid, aliphatic odor**	Physical State: **Liquid**	Solubility in Water: **Negligible**
Boiling Point: **247° – 282° F**	Specific Gravity (HO=1) **0.715-0.791**	Melting Point: **NA**
Vapor Pressure: **@ 100° F: 26.0 mm Hg**	Vapor Density (Air=1) **3.8**	Freezing Point: **Not Established**
Percent Volatiles: **100 %**	Evaporation Rate: **Benzene: <.01% Butyl Acetate =1: 1.2.**	Reactivity in Water: **NA**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **55° F TCC**	Flammable Limits (in air): **LEL: 1.0%; UEL: 7%**
Extinguishing Media: **Dry chemical, carbon dioxide, water fog or foam. Do not use a direct water stream. Product will float and can re-ignite.**	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, acrid smoke and irritating fumes.**	Special Fire & Explosion Hazards: **Flammable liquid. Vapors are heavier than air and can flow along surfaces to ignition sources and flash-back. Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.**
Method Used: **TCC**	Auto-Ignition Temperature: **Not Established**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Dizziness, nausea or vomiting. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors.**
Effects of Overexposure: **Medical Conditions Aggravated By Exposure** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.**	
Acute: **Irritation to eyes, lungs, and mucous membranes**	Chemical Listed as a Carcinogen (or Potential Carcinogen): National Toxicology Program: **NO** L.A.R.C. Monographs: **NO** OSHA: **NO**
Chronic: **Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage.**	

Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
>**8 ML/KG (Rat)**	**>4 ML/KG (Rat)**	**3400 PPM/4H (Rat)**

Emergency & First Aid Procedures:

Eye Contact:

Flush with water and call physician

Skin Contact:

Clean with rubbing alcohol, followed by soap and water.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

Consult a Physician. DO NOT INDUCE VOMITING

Primary Route of Entry:

Inhalation

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable at ambient temperatures and pressures	**Strong oxidizers, acids, bases.**
Hazardous Decomposition Products:	Hazardous Polymerization:
Toxic gases or vapors, such as oxides of carbon and nitrogen along with trace of HCL may be released during a fire.	**NA**

Conditions to Avoid:
Open flames and sparks. Closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Absorb using inert material. Use non-sparking tools. Transfer into secure containers for proper disposal. Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21(a) (1) Ignitability: D001

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
Use NIOSH-Certified respiratory protection for organic vapor if necessary.	**Impervious safety glasses with side shields recommended.**
Protective Gloves:	Other Protective Equipment:
Impervious gloves are recommended to prevent skin contact.	**Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT, IMO**	Identification Number: **UN 1268**
Proper Shipping Name: **Petroleum Distillates, N.O.S.**	Labels Required: **Flammable Liquid**
Hazard Classification: **3**	Other Requirements: **49 CFR 172.101 Adhesives, UN1268, IMDG Class 3.2, Pg. 3271, Flash Point -13° C**
Packing Group: **11**	

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
None

Date of Previous MSDS:
August 2000

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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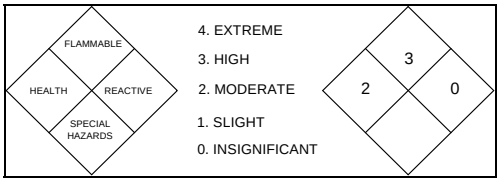
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 115 ROYAL EDGE SPLICE ADHESIVE
(BLACK)



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Splice Adhesive – Black (Rubber to Rubber)**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Butyl Rubber Adhesive**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078** NFPA Acute Hazard Rating:
Chemical Formula: **Not Established**	**Health 2, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% BY WEIGHT	OSHA PEL	ACGIH TLV
Hexane	**Acute Toxicity**	**110-54-3**	**14**	**500PPM**	**50PPM**
Polyisocyanate	**Irritant**	**28182-81-2**	**<2**	**None Established**	
Toluene	**Acute/Chronic Toxicity**	**108-88-3**	**52**	**200PPM**	**TLV 50PPM OSHA CEIL 300PPM ACGIH SKIN**
Xylene	**Acute/Chronic Toxicity**	**1330-20-7**	**5**	**100PPM**	**ACGIH STEL 150PPM 100PPM**
Nonhazardous as per 29 CFR 1910.1200.	**None**	**None**	**>27**	**None Established**	

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Black viscous liquid, aromatic odor**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **>151° F**	Specific Gravity (Water =1) **.876**	Melting Point: **NA**
Vapor Pressure: **<125 mm Hg @ 25° C**	Vapor Density (Air=1) **3.7**	Freezing Point: **Not Established**
Percent Volatiles: **70 %**	Evaporation Rate: **1.9-9.5 (Ether=1)**	Reactivity in Water: **NA**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point:
0° F (-17.8° C)

Flammable Limits (in air):
LEL: 1.2%; UEL: 7%

Extinguishing Media:
Dry chemical, carbon dioxide, water fog or foam. Do not use a direct water stream. Product will float and can re-ignite.

Fire Fighting Procedures:
Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.
Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.

Hazardous Decomposition Products:
Carbon Dioxide, Carbon Monoxide, acrid smoke and irritating fumes.

Method Used:
TCC

Special Fire & Explosion Hazards:
Flammable liquid. Vapors are heavier than air and can flow along surfaces to ignition sources and flash-back. Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.

Auto-Ignition Temperature:
Not Established

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Signs and Symptoms of Exposure:
Dizziness, nausea or vomiting. Difficulty in breathing. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors. Liquid can cause eye and skin irritation.

Effects of Overexposure:
Medical Conditions Aggravated By Exposure.
Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions. Individuals with neurological diseases should avoid exposure to hexane. Individuals who are sensitized to Isocyanates, and those with pre-existing lung diseases or conditions, including non-specific bronchial hyperactivity or asthma, must avoid all exposure to Isocyanates.

Acute:
Irritation to eyes, lungs, and mucous membranes.

Primary Route of Exposure:
Skin absorption and inhalation.
Toluene LC_{50}: 8,000ppm/4hr, rat; Polyisocyanate LC_{50}: <1,150 mg/m³, rat: Xlyene LC_{50}: 5,000 ppm/4hr, rat; Toluene LD_{50}: 5 g/kg, rat; HDI LD_{50}: 10 g/kg, rat; Xylene LD_{50}: 4.3 g/kg, rat.

Chronic:
Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage.

Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
>8 ML/KG (Rat)	**>4 ML/KG (Rat)**	**3400 PPM/4H (Rat)**

Emergency & First Aid Procedures:
Eye Contact:
Flush with water for 15 minutes and call physician.
Skin Contact:
Clean with rubbing alcohol, followed by soap and water.
Inhalation:
Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.
Ingestion:
Consult a Physician and advise as to the nature of the product. DO NOT INDUCE VOMITING.
Primary Route of Entry:
Inhalation, Skin absorption.

SECTION 6 – REACTIVITY DATA

Stability:	Incompatibility:
Stable at ambient temperatures and pressures	**Strong oxidizers, acids, bases.**
Hazardous Decomposition Products:	Hazardous Polymerization:
Toxic gases or vapors, such as oxides of carbon and nitrogen along with trace of HCL may be released during a fire.	**Will not occur**

Conditions to Avoid:
Avoid open flames and sparks. Avoid closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Absorb using inert material. Use non-sparking tools. Transfer into secure containers for proper disposal. Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21(a) (1) Ignitability: D001

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
Use NIOSH-Certified respiratory protection for organic vapor if necessary.	**Impervious glasses recommended**
Protective Gloves:	Other Protective Equipment:
Impervious gloves are recommended to prevent skin contact.	**Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency:	Identification Number:
U.S.A., DOT, IMO	**UN1133**
Proper Shipping Name:	Labels Required:
Adhesives	**Flammable Liquid**
Hazard Classification:	Other Requirements:
3	**49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174, Flash Point -18° C**

Packing Group:
ll

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

August 2000

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

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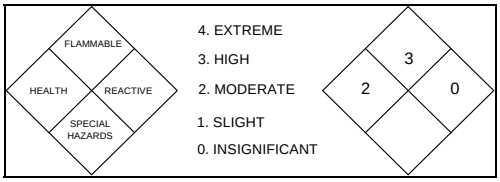
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 116 ROYAL EDGE SPLICE ADHESIVE (CLEAR)



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Splice Adhesive – Clear (Rubber to Rubber)**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Butyl Rubber Adhesive**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	% BY WEIGHT	OSHA PEL	ACGIH TLV
Hexane	**Acute Toxicity**	**110-54-3**	**14**	**500PPM**	**50PPM**
Polyisocyanate	**Irritant**	**28182-81-2**	**<2**	**None Established**	
Toluene	**Acute/Chronic Toxicity**	**108-88-3**	**52**	**200PPM**	**TLV 50PPM OSHA CEIL 300PPM ACGIH SKIN**
Xylene	**Acute/Chronic Toxicity**	**1330-20-7**	**5**	**100PPM**	**ACGIH STEL 150PPM 100PPM**
Nonhazardous as per 29 CFR 1910.1200.	**None**	**None**	**>27**	**None Established**	

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Clear viscous liquid, aromatic odor**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **>151° F**	Specific Gravity (Water =1) **.876**	Melting Point: **NA**
Vapor Pressure: **<125 mm Hg @ 25° C**	Vapor Density (Air=1) **3.7**	Freezing Point: **Not Established**
Percent Volatiles: **70 %**	Evaporation Rate: **1.9-9.5 (Ether=1)**	Reactivity in Water: **NA**
pH (Full Strength) **Not Established**	pH (Recommended Dilution): **Not Established**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **0° F (-17.8° C)**	Flammable Limits (in air): **LEL: 1.2%; UEL: 7%**
Extinguishing Media: **Dry chemical, carbon dioxide, water fog or foam. Do not use a direct water stream. Product will float and can re-ignite.**	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.**
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, acrid smoke and irritating fumes.**	Special Fire & Explosion Hazards: **Flammable liquid. Vapors are heavier than air and can flow along surfaces to ignition sources and flash-back. Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.**
Method Used: **TCC**	Auto-Ignition Temperature: **Not Established**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Dizziness, nausea or vomiting. Difficulty in breathing. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors. Liquid can cause eye and skin irritation.**
Effects of Overexposure: **Medical Conditions Aggravated By Exposure.** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions. Individuals with neurological diseases should avoid exposure to hexane. Individuals who are sensitized to Isocyanates, and those with pre-existing lung diseases or conditions, including non-specific bronchial hyperactivity or asthma, must avoid all exposure to Isocyanates.**	
Acute: **Irritation to eyes, lungs, and mucous membranes.**	Primary Route of Exposure: **Skin absorption and inhalation.** **Toluene LC_{50}: 8,000ppm/4hr, rat; Polyisocyanate LC_{50}: <1,150 mg/m³, rat: Xlyene LC_{50}: 5,000 ppm/4hr, rat; Toluene LD_{50}: 5 g/kg, rat; HDI LD_{50}: 10 g/kg, rat; Xylene LD_{50}: 4.3 g/kg, rat.**
Chronic: **Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage.**	

Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
>8 ML/KG (Rat)	**>4 ML/KG (Rat)**	**3400 PPM/4H (Rat)**

Emergency & First Aid Procedures:

Eye Contact:

Flush with water for 15 minutes and call physician.

Skin Contact:

Clean with rubbing alcohol, followed by soap and water.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

Consult a Physician and advise as to the nature of the product. DO NOT INDUCE VOMITING.

Primary Route of Entry:

Inhalation, Skin absorption.

SECTION 6 – REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures**	Incompatibility: **Strong oxidizers, acids, bases.**
Hazardous Decomposition Products: **Toxic gases or vapors, such as oxides of carbon and nitrogen along with trace of HCL may be released during a fire.**	Hazardous Polymerization: **Will not occur**

Conditions to Avoid:
Avoid open flames and sparks. Avoid closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Absorb using inert material. Use non-sparking tools. Transfer into secure containers for proper disposal. Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21(a) (1) Ignitability: D001

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **Use NIOSH-Certified respiratory protection for organic vapor if necessary.**	Eye Protection: **Impervious safety glasses recommended**
Protective Gloves: **Impervious gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT, IMO**	Identification Number: **UN1133**
Proper Shipping Name: **Adhesives**	Labels Required: **Flammable Liquid**
Hazard Classification: **3**	Other Requirements: **49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174, Flash Point -18° C**

Packing Group:
ll

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
None

Date of Previous MSDS:
August 2000

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9 Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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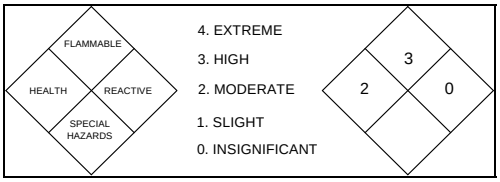
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 117 ROYAL EDGE BONDING ADHESIVE
(SOLVENT BASED)



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Bonding Adhesive – Solvent Based (contact)**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Polychloroprene Based Adhesive**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Polychloroprene**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 2, Flammability 0, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	OSHA STEL	OSHA PEL	ACGIH TLV
Product	**Flammable**	**NA**	**ND**	**ND**	**ND**
Acetone 19± 1		**67-64-1**	**150 PPM**	**750 PPM**	**750PPM**
Toluene 26± 2		**108-88-3**	**150 PPM**	**150 PPM**	**150 PPM**
Textile Spirits 33± 2 (Primarily Hexane)		**110-54-3**	**NA**	**50 PPM**	**50 PPM**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Yellow amber liquid, strong aromatic odor.**	Physical State: **Liquid**	Solubility in Water: **Insoluble, (Soluble in hydrocarbon solvents)**
Boiling Point: **131° – 288° F**	Specific Gravity (HO=1) **0.825**	Melting Point: **NA**
Vapor Pressure: **@ 20° C: 9.5-185**	Vapor Density (Air=1) **2.0-4.0**	Freezing Point: **Not Established**
Percent Volatiles: **@70° F: 78.1%**	Evaporation Rate: **Not Established**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **- 18° C TCC**	Flammable Limits (in air): **LEL: 1.0; UEL: 12.8**
Extinguishing Media: **Water fog followed by standard fire extinguishers-course stream.** **Dry chemical and foam can also be used**.	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products**. **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.**	Special Fire & Explosion Hazards: **Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.**
Method Used: **TCC**	Auto-Ignition Temperature: **870° F**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Dizziness, nausea or vomiting. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors**.
Effects of Overexposure: **Medical Conditions Aggravated By Exposure** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions**.	
Acute: **Irritation to eyes, lungs, and mucous membranes**	Chemical Listed as a Carcinogen (or Potential Carcinogen): National Toxicology Program: **NO** L.A.R.C. Monographs: **NO** OSHA: **NO**
Chronic: **Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage**.	

Emergency & First Aid Procedures:

Eye Contact:

Flush with water and call physician

Skin Contact:

Clean with rubbing alcohol, followed by soap and water.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

Consult a Physician. DO NOT INDUCE VOMITING

Primary Route of Entry:

Inhalation.

SECTION 6 – REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures**	Incompatibility: **Strong oxidizers, acids, bases.**
Hazardous Decomposition Products: **Toxic gases or vapors, such as oxides of carbon and nitrogen along with trace of HCL may be released during a fire.**	Hazardous Polymerization: **NA**

Conditions to Avoid:
Open flames and sparks. Closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Absorb using inert material. Use non-sparking tools. Transfer into secure containers for proper disposal.
Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21(a) (1) Ignitability: D001

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **Use NIOSH-Certified respiratory protection for organic vapor if necessary.**	Eye Protection: **Impervious glasses recommended**
Protective Gloves: **Impervious gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:

Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT, IMO**	Identification Number: **UN 1133**
Proper Shipping Name: **Adhesives**	Labels Required: **Flammable Liquid**
Hazard Classification: **3**	Other Requirements: **49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174, Flash Point -18° C**
Packing Group: **11**	

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
None

Date of Previous MSDS:
August 2000

Changes Since Previous MSDS:
Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:
(574) 293-9096

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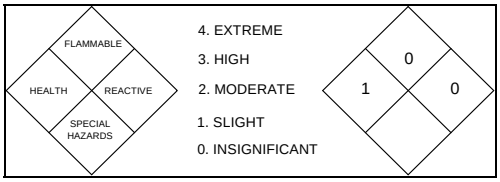
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 118 ROYAL EDGE BONDING ADHESIVE
(WATER BASED)



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Bonding Adhesive – Water Based (contact)**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Propylene Glycol Based Adhesive**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Propylene**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **NA** HMIS Acute Hazard Rating: **Health 1, Flammability 0, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	OSHA (1910. 1200)	Case No.	OSHA STEL	OSHA PEL	ACGIH TLV
Propylene Glycol (less than 1% of total formula	**25265-71-8**	**57-55-6**			

Skin-skin absorption must be considered as a route of exposure

C-ceiling + allow. exposure level should not be exceeded for any time period

Stel=short term exposure limit (X-SARA 313 = Chemical is subject to reporting requirements of Section 313 of Title 111 of S.A.R.A 40 CFR Part 372)

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **White milky liquid**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **212°F (100°C)**	Specific Gravity (HO=1) **1.0**	Melting Point: **NA**
Vapor Pressure: **Not Established**	Vapor Density (Air=1) **Heavier than air**	Freezing Point: **Not Established**
Percent Volatiles: **50%**	Evaporation Rate: **Slower than diethyl ether**	Reactivity in Water: **NA**
pH (Full Strength) **NA**	pH (Recommended Dilution): **NA**	Refraction Index: **NA**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **NA**	Flammable Limits (in air): **NA**
Extinguishing Media: **Water**	Fire Fighting Procedures: **None Known**
Hazardous Decomposition Products: **Burning, including when heated by welding or cutting will produce smoke, Carbon Dioxide, Carbon Monoxide.**	Special Fire & Explosion Hazards: **Not Established**
Method Used: **Not Established**	Auto-Ignition Temperature: **Not Established**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **313 mm hg @ 20°/C**	Signs and Symptoms of Exposure: **May cause respiratory irritation.**
Effects of Overexposure: Medical Conditions Aggravated by Exposure: **May cause transient skin irritation/eye irritation**.	
Acute: **May cause severe gastrointestinal irritation if swallowed.**	Chemical Listed as a Carcinogen (or Potential Carcinogen): **None currently known.**
Chronic: **None currently known.**	

Emergency & First Aid Procedures:

Eye Contact:

Flush with large amounts of water, lifting upper and lower lids occasionally. Continue for at least 15 minutes and call physician.

Skin Contact:

Remove contaminated clothing and wash affected area with soap and water. Obtain medical attention if irritation persists.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

If swallowed, immediately give 1 or 2 glasses of water and call a Poison Control Center, Hospital Emergency Room, or Physician for information to induce vomiting.

Primary Route of Entry:

Inhalation, skin or eye contact.

SECTION 6 – REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures**	Incompatibility: **None known**
Hazardous Decomposition Products: **Smoke, carbon monoxide, and carbon dioxide.**	Hazardous Polymerization: **Will not occur**

Conditions to Avoid:
None known

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Absorb using inert material. Transfer into secure containers for proper disposal.
Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose in accordance with federal, state, and local regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **If applied by spraying, use NIOSH-Certified respiratory protection for organic vapor if necessary. Refer to OSHA 29 CFR 1910.134 "Respiratory Protection".**	Eye Protection: **Wear safety glasses with side shields, Wear Face shield as necessary when spraying.**
Protective Gloves: **Impervious gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:

Natural ventilation should be adequate under normal conditions.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:

Store in cool, dry, well ventilated facility. Keep containers closed when not in use. Protect from freezing.

Other Precautions:

Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact. Do not take internally. Close containers after each use. Keep away from children.

Work/Hygienic Practices:

Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **Not Applicable**	Identification Number: **Not Applicable**
Proper Shipping Name: **Not Applicable**	Labels Required: **Not Applicable**
Hazard Classification: **Not Applicable**	Other Requirements: **Not Applicable**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

August 2000

Changes Since Previous MSDS:

Comment change in sections: 1 thru 9
Add sections: 10,11

Telephone Number for Additional Information:

(574) 293-9096

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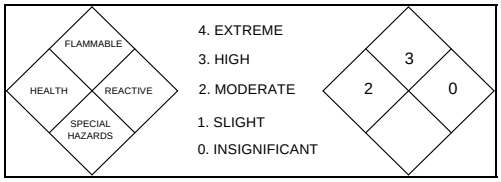
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 119 ROYAL EDGE LOW VOC BONDING ADHESIVE SOLVENT BASED



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Royal Edge Low VOC Bonding Adhesive Solvent Based**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Solvent Based Adhesive** / Product Code: **BAS5GLV (5-gallon)**	Manufacturer's Name/Address: **Roofing Products International, Inc. 57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**	NFPA Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**
Chemical Formula: **Polychloroprene Based Adhesive**	HMIS Acute Hazard Rating: **Health 2, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names) Commo Names Hazardous components 1% or greater	COMMON NAME	% (by wt)	CASE NO.	OSHA PEL-TWA	ACGIH TLV-TWA
Tert-butyl Acetate	**Acetic Acid**	**30-60**	**540-88-5**	**200 ppm**	**200 ppm**
Toluol	**Toluene**	**1-6**	**108-88-3**	**200 ppm** OSHA CEIL: **300 ppm**	**20 ppm**
Acetone	**Methyl Ketone**	**10-40**	**67-64-1**	**1000 ppm**	**500 ppm** ACGIH STEL: **750 ppm**
Acetic Acid, Methyl Ester	**Methyl Acetate**	**1-15**	**79-20-9**	**200 ppm**	**200 ppm** ACGIH STEL: **750 ppm**
Nonhazardous as per CFR 1910.1200	**None**	**< 58**	**TSCA Registered**	**Non Established**	

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Yellow liquid, with a strong solvent odor.**	Physical State: **Liquid**	Solubility in Water: **Insoluble, not miscible**
Boiling Point: **131°F**	Specific Gravity (H^2O=1) **0899**	Melting Point: **NA**
Vapor Pressure: @ 20° C (68° F): **175 mm Hg**	Vapor Density (Air=1) **Unknown**	VOC Content: **218 g/l**
Volatiles: (% Wt or % Vol) **77%**	Evaporation Rate: (Butyl Acetate=1) **Unknown**	Solids Content: **22%**
Weight per Gallon: **7.45 +- 0.15 lb/gal**	pH undiluted product: **Unknown**	Ignition Temperature: **869° F**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point:
- 19° C, 2° F

Flammable Limits (in air):
LEL: 2.6 Vol %; UEL: 13 Vol %

Extinguishing Media:
Water fog followed by standard fire extinguishers-course stream. Dry chemical, carbon dioxide, and foam can also be used along with vaporizing liquid type agents.
Water should be used to keep fire-exposed containers cool and to protect firefighters attempting to stop a leak/spill or extinguish a fire.

Fire Fighting Procedures:
Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products.
Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.

Hazardous Decomposition Products:
Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and Hydrogen Chloride, (thermal degradation products).

Special Fire & Explosion Hazards:
This product is non-explosive, however formation of explosive air/vapor mixtures are possible.
Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.

Method Used:
Not Known

Auto-Ignition Temperature:
This product is not self-igniting.

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit:
Not Established

Signs and Symptoms of Exposure:
Dizziness, nausea or vomiting. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors.

Effects of Overexposure:
Medical Conditions Aggravated By Exposure
Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.

Chemical Listed as a Carcinogen (or Potential Carcinogen):
Toluene is listed by IARC as a class 3, unclassifiable as to carinogenicity in humans.

Acute Toxicity: 108-88-3 Toluene

Oral	LD50	5000 mg/kg (rat
Dermal	LD50	1214 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

Chronic:
Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage.

Emergency & First Aid Procedures:
Eye Contact: **Flush with water and call physician**
Skin Contact: **Clean with rubbing alcohol, followed by soap and water.**

Inhalation: **Remove to fresh air. Administer oxygen or artificial Respiration, if necessary. Call a physician.**

Primary Irritant:
to eyes: **Irritating effect**
to skin: **Irritant to skin and mucous membranes**

Ingestion: **Consult a physician. DO NOT INDUCE VOMITING**
Primary Route of Entry: **Inhalation.**

SECTION 6 – REACTIVITY DATA

Stability:
Stable at ambient temperatures and pressures

Incompatibility:
Strong oxidizers, acids, bases.

Hazardous Decomposition Products:
Toxic gases or vapors, such as oxides of carbon and nitrogen along with trace of HCL may be released during a fire.

Hazardous Polymerization:
NA

Conditions to Avoid:
Open flames and sparks. Closed areas that restrict adequate ventilation. Toxic to fish. Do not contaminate ground water, water course, or sewage systems. Toxic to aquatic life.

SECTION 7 – SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Absorb using inert material. Use non-sparking tools. Transfer into secure containers for proper disposal. Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21(a) (1) Ignitability: D001

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
Use NIOSH-Certified respiratory protection for organic vapor if necessary.	**Impervious glasses recommended**
Protective Gloves:	Other Protective Equipment:
Impervious gloves are recommended to prevent skin contact.	**Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of direct heat and ignition. Keep containers closed when not in use.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency:	Identification Number:	Labels Required:	Proper Shipping Name:
U.S.A., DOT, IMO	**UN 1133**	**Flammable Liquid**	**Adhesives**
Hazard Classification:	Packing Group:	Other Requirements:	
3	**II**	**None Known**	

SECTION 11 – MISCELLANEOUS INFORMATION

Date of Previous MSDS:	Telephone Number for Additional Information:	Changes Since Previous MSDS:
None	**(574) 293-9096**	**NONE: New product**

Additional Information:
VOC Rule 1168 for OTC: 215 gm/l
VOC: 52 gm/l

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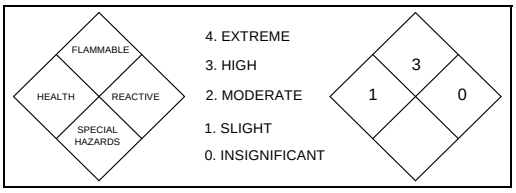
MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 120 ROYAL EDGE LOW VOC PRIMER/ACTIVATOR



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Royal Edge Low VOC Primer/Activator**		24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Sythetic Rubber Polymers**	Product Code: **PA1GLV (1-gallon)**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**		Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**		NFPA Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	Case No.	% by Weight
Heptane	**142-82-5**	**5-20**

PEL 2000 mg/m^3, 500 ppm
REL Short-term value: C 1800* mg/m^3, C 440* ppm
Long-term value: 350 mg/m^3, 85 ppm
***15-min**
TVL Short-term value: 2050 mg/m^3, 500 ppm
Long-term value: 1640 mg/m^3, 400 ppm

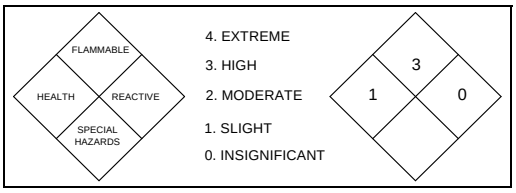
4-chloro-alpha, alpha, alpha-trifluorotoluene (oxsol 100)	**98-56-6**	**65-85**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Thin clear liquid, characteristic odor**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **98° C (208°F)**	Specific Gravity (HO=1) **1.13 (Water=1)**	Melting Point: **NA**
Vapor Pressure: **@ 20°C, 68°F** **48.0 hPa (36 mm Hg)**	Vapor Density (Air=1) **3.6**	Freezing Point: **Not Established**
Percent Volatiles: **85 %**	Evaporation Rate: **(ethyl ether = 1): 3.5**	Reactivity in Water: **Not Established**
Organic Solid Content: **90.5%**	Percent Solids (by weight): **9.5%**	Ignition Temperature: **215° C (419° F)**

Additional Information:
VOC: 1.79 lbs/gal
215 g/l SCAQMD RULE 1168 METHOD
WEIGHT PER GALLON: 9.4 lbs

MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 120 ROYAL EDGE LOW VOC PRIMER/ACTIVATOR



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Royal Edge Low VOC Primer/Activator**		24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **Sythetic Rubber Polymers**	Product Code: **PA1GLV (1-gallon)**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**		Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **Not Established**		NFPA Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0**

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4-chloro-alpha, alpha, alpha-trifluorotoluene (oxsol 100)	**98-56-6**	**65-85**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Thin clear liquid, characteristic odor**	Physical State: **Liquid**	Solubility in Water: **Insoluble**
Boiling Point: **98° C (208°F)**	Specific Gravity (HO=1) **1.13 (Water=1)**	Melting Point: **NA**
Vapor Pressure: **@ 20°C, 68°F** **48.0 hPa (36 mm Hg)**	Vapor Density (Air=1) **3.6**	Freezing Point: **Not Established**
Percent Volatiles: **85 %**	Evaporation Rate: **(ethyl ether = 1): 3.5**	Reactivity in Water: **Not Established**
Organic Solid Content: **90.5%**	Percent Solids (by weight): **9.5%**	Ignition Temperature: **215° C (419° F)**

Additional Information:
VOC: 1.79 lbs/gal
215 g/l SCAQMD RULE 1168 METHOD
WEIGHT PER GALLON: 9.4 lbs

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **-4°C (25 F°)**	Flammable Limits (in air): **LEL: 1.1%; UEL: 7.0%**
Extinguishing Media: **Dry chemical (extinguishing powder), CO2, or sand.** **Do not use water as an extinguishing agent.** **Do not flush with water or aqueous cleansing agents.** **Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, or sawdust).**	Fire Fighting Procedures: **Use water spray to cool adjacent surfaces and fire exposed containers. Protect against inhalation of combustion products. Treat as "Class B" fire.** **Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: T**hermal Degradation products:** **Oxides of carbon, nitrogen and hydrocarbons, hydrogen bromide. Irritating fumes.**	Special Fire & Explosion Hazards: **Flammable liquid. Vapors are heavier than air and can flow along surfaces to ignition sources and flash-back. Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.**
Method Used: **Estimate based on the flash point of the most volatile component.**	Auto-Ignition Temperature: **Product in not self-1igniting**

SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: **Not Established**	Signs and Symptoms of Exposure: **Eye contact may cause severe eye irritation, redness, tearing and blurred vision. Prolonged skin contact may cause irritation, dermatitis and drying of the skin. Other symptoms are dizziness, nausea or vomiting. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors. Inhalation may cause repiratory system irritation and central nervous system depression (Narcosis) fatigue.**
Effects of Overexposure: **Medical Conditions Aggravated By Exposure.** **Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions**.	
Acute: **Irritation to eyes, lungs, and mucous membranes**	Chemical Listed as a Carcinogen (or Potential Carcinogen): National Toxicology Program: **NO** L.A.R.C. Monographs: **NO** OSHA: **NO**
Chronic: **Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage**.	

Emergency & First Aid Procedures:

Eye Contact:

Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain. Call physician

Skin Contact:

Clean with rubbing alcohol, followed immediately by washing affected area with soap and water.

Inhalation:

Remove to fresh uncontaminated air. Administer oxygen or artificial respiration, if necessary. Call physician.

Ingestion:

Consult a Physician. DO NOT INDUCE VOMITING

Primary Route of Entry:

Inhalation, skin absorption.

Emergency & First Aid Procedures:
Eye Contact:
Hold eyes open and flush immediately with a gentle stream of water for at least 15 minutes, preferable at an eyewash fountain. Call physician
Skin Contact:
Clean with rubbing alcohol, followed immediately by washing affected area with soap and water.
Inhalation:
Remove to fresh uncontaminated air. Administer oxygen or artificial respiration, if necessary. Call physician.
Ingestion:
Consult a Physician. DO NOT INDUCE VOMITING
Primary Route of Entry:
Inhalation, skin absorption.

SECTION 6 – REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures**	Incompatibility: **Strong oxidizers, acids, bases.**
Hazardous Decomposition Products: **Partial combustion may release toxic gases or vapors, such as oxides of carbon and nitrogen along with traces of HCL.**	Hazardous Polymerization: **Will not occur.**

Conditions to Avoid:
Open flames, sparks, and closed areas that restrict adequate ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill:
Shut off and eliminate all ignition sources. Recover released product using inert materials such as sand, earth, or other suitable materials. Minimize skin contact. Use non-sparking tools. Ventilate confined spaces. Keep product clear of sewers, water, or extensive land areas. Assure conformity with applicable government regulations. Transfer into secure containers for proper disposal. Avoid static electricity build-up by grounding a fixed equipment and transfer containers. Use personal protective equipment as outlined below.

Large Spill:
Same as small spill.

Waste Disposal Method:
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21: Ignitability
Do not dispose with housefold garbage. Dispose according to local, state, and federal regulations.

Water Hazard Class:
Class 2, self assessment. Do not allow product to contaminate ground water, water course, or sewage systems.
Danger to drinking water even in small amounts. Poisonous to fish, plankton, and other aquatic organisms.
Dispose of as a hazardous waste in accordance with EPA/RCRA regulations 40CFR261 21: Ignitability

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: **In areas with inadequate ventilation, the use of a NIOSH-Certified respiratory protection for organic vapor is recommended.**	Eye Protection: **Impervious glasses recommended**
Protective Gloves: **Polyvinyl alcohol, nitrile rubber, or neoprene gloves are recommended to prevent skin contact.**	Other Protective Equipment: **Under normal application conditions, protective glasses, gloves, and clothing are adequate.**

Ventilation:
Provide adequate ventilation to maintain airborne concentrations below OSHA PELs.

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Store and use away from all sources of sparks, direct heat and ignition. Keep containers closed when not in use. Vapors of this material are heavier than air and will collect in low or confined areas. Empty containers can contain explosive vapors. Bond and ground all fixed and transfer equipment.

Other Precautions:
Provide adequate ventilation and avoid prolonged or repeated contact with the skin. Wash with soap and water after contact.

Work/Hygienic Practices:
Maintain good personal hygiene practices. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in work areas. Wash exposed skin before eating, drinking, smoking, or applying cosmetics.

SECTION 10 - TRANSPORTATION

Regulatory Agency: **U.S.A., DOT**	DOT Identification Number: **UN1133**
DOT Proper Shipping Name: **Adhesive**	DOT Labels Required: **Adhesives, containing flammable Liquid**
DOT Hazard Classification: **3**	DOT Packing Group: **II**

EPA SARA Title III (40CFR355): There are no components present in the product at a level which would require reporting.
This product contains a chemical that is listed on the following states hazardous material list.
Pennsylvania Hazardous Substance List: YES
New Jersey Workplace Hazardous Substance List: YES
Massachusetts Substance List: YES
Canada (WHMIS) Ingredient Disclosure List: YES
California Prop0osition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):
This product contains listed substances, which the State of California has found to cause cancer, birth defects, or other reproductive harm, which would require a warning under the statute. Toluene CAS 108-88-3

EPA SARA Title III Section 313 (40CFR372): Aromatic hydrocarbon solvent C.A.S. # 108-88-3 20-40%.

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:
NA

Date of Previous MSDS:
None

Changes Since Previous MSDS:
None, new product

Telephone Number for Additional Information:
(574) 293-9096

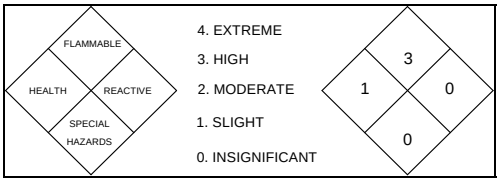
DISCLAIMER

The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information is accurate, complete, or representative. Roofing Products International, Inc. assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons if reasonable safety procedures are not followed.

MATERIAL SAFETY DATA SHEET

ROOFING PRODUCTS INTERNATIONAL, INC.

MSDS 121 ROYAL EDGE LOW VOC MEMBRANE CLEANER



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: **Royal Edge LOW VOC Membrane Cleaner**	24 Hour Emergency Telephone Number: **800-424-9300 CHEMTREC**
Chemical Name/Synonyms: **N/A** Product Code: **MCLV**	Manufacturer's Name: **Roofing Products International, Inc**.
Chemical Family: **Mixture**	Manufacturer's Address: **57460 Dewitt St., Elkhart, IN 46517-1078**
Chemical Formula: **N/A**	NFPA Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0** HMIS Acute Hazard Rating: **Health 1, Flammability 3, Reactivity 0**

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names)	% wt or %vol	Case No.	
Tert-Butyl Acetate	**100%**	**540-88-5**	PEL **950 mg/m3, 200ppm** TLV **950 mg/m3, 200ppm** REL **950 mg/m3, 200ppm**

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: **Clear colorless liquid with solvent odor.**	Physical State: **Liquid**	Solubility in Water: **insoluble**
Boiling Point: **208°F (98°C)**	Specific Gravity (HO=1) **.86**	Melting Point: **N/A**
Danger of Explosion: **Air/vapor mixtures may be explosive.**	Organic Solvents: **100%**	Weight Per Gallon: **7.17 lbs.**

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: **59°F (15°C)**	Flammable Limits (in air): **LEL: 1.0% UEL: 7%**
Extinguishing Media: **Fight large fires with alcohol resistant foam or water spray. Co2, extinguishing powder, or water spray can be used. Fight**	Fire Fighting Procedures: **Limit fire fighting to those trained to do so. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved**.
Hazardous Decomposition Products: **In the event of combustion, carbon dioxide, smoke, carbon compound and other decomposition products may be released.**	Special Fire & Explosion Hazards: **Material is volatile and gives off vapors which may travel along the ground or be moved by ventilation and ignited by static sparks, pilot lights, electric motors, welders, heaters, or other sources of ignition at far from the application point. Welding or cutting on or near empty containers may result in vapor ignition and explosions.**
Method Used: **Estimate based on flash point of most volatile component.**	Auto-Ignition Temperature: **Undetermined**

SECTION- 5 HEALTH HAZARD DATA

Primary Routes of Entry:
Inhalation _X_ Skin Absorption_X_ Ingestion_X_ None___

Effects of Overexposure:
Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.

Signs and Symptoms of Exposure:
Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals.

Acute:
Inhalation: Breathing large amounts of vapor or mist may be harmful. Symptoms usually occur at air concentration higher than the recommended exposure limits.
Ingestion: Swallowing this material may be harmful. Material may get into the lungs during swallowing or vomiting causing lung inflammation and injury.
Eyes: May cause eye irritation. Symptoms include stinging, tearing, and redness.
Skin: Can cause skin irritation. Prolonged or repeated contact can dry the skin. Symptoms include drying and cracking, burns, and other skin damage. Although unlikely during safe handling and use, material can be absorbed thru the skin.

Chronic:
Overexposure to this material (or its components), has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, and mild reversible kidney effects with kidney damage and cardiac sensitization.
This material (or a component) has been shown to cause defects in laboratory animal studies. The relevance to humans is uncertain. This material has not caused cancer in laboratory animals.
Ethylbenzene has been shown to cause cancer in laboratory animals but the relevance of this finding to humans is unclear. IARC (International Agency for Research on Cancer) has classified ethylbenzene as a possible human carcinogen.
Benzene: Know to the state of California to cause cancer.
Benzene and Toluene: Known to the state of California to cause reproductive harm.

Carcinogen Listed In:
NTP____ IARC Monograph____ OSHA____ Not Listed _X_

Emergency & First Aid Procedures:
Eye Contact: Move individual away from exposure and into fresh air. Flush eyes gently with clean water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.
Skin Contact: Remove contaminated clothing. Flush exposed area with large amounts of clean water. If skin is damaged, seek medical attention. If symptoms persist, seek medical attention. Launder or properly dispose of contaminated clothing.
Inhalation: If symptoms develop, immediately move the individual away from exposure into fresh air. Seek immediate medical attention. If breathing is difficult, administer oxygen. If the person is not breathing, begin artificial respiration.
Ingestion: Seek medical attention. If individual is drowsy or unconscious, place the individual on the left side with the head down. Do not give anything by mouth. Contact a physician, medical facility, or poison control center for advice about wether to induce vomiting. Do not leave the individual un-attended.

Note to Physicians:
Inhalation of high concentrations of this material, may be associated with cardiac arrhythmias. Sympathomimetic drugs my initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity. (See section on Ingestion) when deciding wether to induce vomiting. Pre-existing disorders of the following organs, (or organ systems) may be aggravated by exposure to this material: skin, lung (asthma-like conditions), liver, kidney, and auditory system. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias, (irregular heartbeats) if exposed to high concentrations of this material.

SECTION 6 – REACTIVITY DATA

Stability:
Stable

Incompatibility:
Strong oxidizing agents.

Hazardous Decomposition Products:
Carbon monoxide, carbon monoxide, and various hydrocoarbons.

Hazardous Polymerization:
Will not occur

Conditions to Avoid:
Fires, sparks, static electricity, and confined areas without ventilation.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:
Small spill: **Eliminate all sources of ignition such as flares, electrical sparks, flames, and pilot lights. Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to proper collection containers.**

Large Spill:
Stop spill at source. Eliminate all sources of flames, electrical sparks, and pilot lights. Persons not wearing protective equipment should be excluded from the spill and clean-up area until clean-up is complete. Prevent materials from entering drains, sewers, streams or other bodies of water. Prevent the spreading of spilled material. Using proper equipment, transfer spilled material to clean recovery containers. Absorb unrecoverable product and transfer the contaminated absorbent soil, debris, and other materials to containers for disposal. Promptly notify the proper authorities that a spill has occurred.

Waste Disposal Method:
Dispose accordance with applicable local, state, and federal regulations. Do not dispose in household garbage.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection:	Eye Protection:
If vapors exceed TLV, use self contained organic mask MSHA/NIOSH approved.	**Safety glasses with side shields are recommended.**
Protective Gloves:	Other Protective Equipment:
Chemical resistant gloves.	**None required under normal installation conditions.**

Ventilation: **Local Exhaust __X___ Sufficient to keep vapors below TLV or PEL**
Mechanical (General) to maintain exposure below TLV ___X____

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:
Store in cool, dry, well ventilated facility. Containers of this material may be hazardous when emptied. Emptied containers retain product residues (vapor, liquid, and/or solids). All hazard precautions given in the data sheet must be observed. All five gallon pails including larger containers such as tanker trucks, tank cars, must be properly grounded against static electricity. Hydrocarbon solvents are non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If the charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids.
Warning: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature or pressure, or sudden ingress of air into vacuum equipment may result in explosions or ignitions without the presence of obvious ignition sources.

Other Precautions:
Store material in cool dry areas in original shipping packaging.

SECTION 10 – TRANSPORTATION

Regulatory Agency:	Identification Number:
DOT	**UN 1123**
Proper Shipping Name:	Labels Required:
Not Applicable	**Flammable**
Hazard Classification:	Hazardous Substance:
3	**Butyl Acetates**

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

None. New Product

Changes Since Previous MSDS:

None

Telephone Number for Additional Information:

(574) 293-9096

DISCLAIMER

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