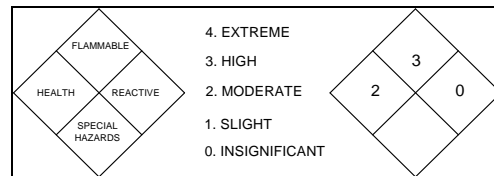


**MATERIAL SAFETY DATA SHEET**  
**ROOFING PRODUCTS INTERNATIONAL, INC.**  
**MSDS 316 ROYAL EDGE TPO BONDING ADHESIVE SOLVENT BASED**



**SECTION 1 – PRODUCT IDENTIFICATION**

Product Name: <b>Royal Edge TPO Bonding Adhesive Solvent Based</b>	24 Hour Emergency Telephone Number: <b>800-424-9300 CHEMTREC</b>
Chemical Name/Synonyms: <b>Solvent Based Adhesive</b>	Manufacturer's Name/Address: <b>Roofing Products International, Inc. 57460 Dewitt St., Elkhart, IN 46517-1078</b>
Chemical Formula: <b>Not Established</b>	NFPA Acute Hazard Rating: <b>Health 2, Flammability 3, Reactivity 0</b>
Chemical Formula: <b>Polychloroprene</b>	HMS Acute Hazard Rating: <b>Health 1, Flammability 3, Reactivity 0</b>

**SECTION 2 – CHEMICAL COMPOSITION**

Ingredient Components (chemical names) Common Names Hazardous components 1% or greater Carcinogens 0.1% or greater	%	Case No.	OSHA PEL-TWA	ACGIH TLV-TWA
<b>Naphtha</b> (petroleum), solvent-refined light textile Spirits	<b>33%</b>	<b>64741-84-0</b>		
<b>Toluene</b>	<b>26%</b>	<b>108-88-3</b>	Short Term Value: C300ppm-500ppm Long Term Value: 200ppm	(188) NIC-75 mg/m <sup>3</sup> (50) NIC-20 ppm
<b>Acetone</b>	<b>19%</b>	<b>67-64-1</b>	2400 mg/m <sup>3</sup> 1000ppm	Short Term Value: 1782 mg/m <sup>3</sup> 750 ppm Long Term Value: 1188 mg/m <sup>3</sup> 500 ppm
Additional Information: <b>Textile Spirits (Primarily N-Hexane) 110-54-3</b>				

**SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS**

Appearance/Odor: <b>Yellow liquid, with a solvent odor.</b>	Physical State: <b>Liquid</b>	Solubility in Water: <b>Insoluble, not miscible</b>
Boiling Point: <b>98°C (208°F)</b>	Specific Gravity (H <sub>2</sub> O=1) <b>082.5</b>	Melting Point: <b>NA</b>
Vapor Pressure: @ 20° C (68° F): <b>233 O hPa (175 mm Hg)</b>	Vapor Density (Air=1) <b>Heavier than air</b>	VOC: <b>4.05 lbs/gal</b>
Volatiles: (% Wt or % Vol) <b>25-85%</b>	Evaporation Rate: (Butyl Acetate=1) <b>Faster than n-Butyl Acetate</b>	Solids Content: <b>22%</b>
Weight per Gallon: <b>6.87 lbs</b>	Solvent Content: Organic Solvents <b>78%</b>	Ignition Temperature: <b>240° C (464° F)</b>

### SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: <b>- 18° C, - 0° F</b>	Flammable Limits (in air): <b>LEL: 1.2 Vol%; UEL: 13 Vol%</b>
Extinguishing Media: <b>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.</b>	Fire Fighting Procedures: <b>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.</b>
Hazardous Decomposition Products: <b>Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and Hydrogen Chloride, (thermal degradation products).</b>	Special Fire & Explosion Hazards: <b><u>This product is non-explosive, however formation of explosive air/vapor mixtures are possible.</u></b>
Method Used: <b>TCC</b>	<b>Keep work areas free from open flames, sparks, hot metal surfaces and other sources of ignition. Ground objects prone to static electricity.</b>
Auto-Ignition Temperature: <b>This product is not self-igniting.</b>	

### SECTION- 5 HEALTH HAZARD DATA

Permissible Exposure Limit: <b>Not Established</b>	Signs and Symptoms of Exposure: <b>Dizziness, nausea or vomiting. Sensitive individuals may exhibit eye, nose, throat or dermal irritation with prolonged exposure to processing fumes or vapors.</b>									
Effects of Overexposure: <b>Medical Conditions Aggravated By Exposure Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.</b>	Chemical Listed as a Carcinogen (or Potential Carcinogen): National Toxicology Program: <b>NO</b> L.A.R.C. Monographs: <b>NO</b> OSHA: <b>NO</b>									
Acute Toxicity: 108-88-3 Toluene	Chronic: <b>Excess exposure can cause CNS depression, headache, nausea, narcosis, and liver and kidney damage.</b>									
<table border="1" style="width: 100%;"> <tr> <td>Oral</td> <td>LD50</td> <td>5000 mg/kg (rat)</td> </tr> <tr> <td>Dermal</td> <td>LD50</td> <td>1214 mg/kg (rabbit)</td> </tr> <tr> <td>Inhalative</td> <td>LC50/4 h</td> <td>5320 mg/l (mouse)</td> </tr> </table>	Oral	LD50	5000 mg/kg (rat)	Dermal	LD50	1214 mg/kg (rabbit)	Inhalative	LC50/4 h	5320 mg/l (mouse)	
Oral	LD50	5000 mg/kg (rat)								
Dermal	LD50	1214 mg/kg (rabbit)								
Inhalative	LC50/4 h	5320 mg/l (mouse)								
Emergency & First Aid Procedures: Eye Contact: <b>Flush with water and call physician</b> Skin Contact: <b>Clean with rubbing alcohol, followed by soap and water.</b>	Inhalation: <b>Remove to fresh air. Administer oxygen or artificial Respiration, if necessary. Call a physician.</b>									
Primary Irritant: to eyes: <b>Irritating effect</b> to skin: <b>Irritant to skin and mucous membranes</b>	Ingestion: <b>Consult a physician. DO NOT INDUCE VOMITING</b> Primary Route of Entry: <b>Inhalation.</b>									

### SECTION 6 – REACTIVITY DATA

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

## 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**

Labels Required:

**Flammable Liquid**

Proper Shipping Name:

**Adhesives**

Hazard Classification:

**3**

Packing Group:

**III**

Other Requirements:

**49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174, Flash Point -18° C**

## SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

**None**

Date of Previous MSDS:

**March 21, 2007**

Telephone Number for Additional Information:

**(574) 293-9096**

Changes Since Previous MSDS:

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

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