

Article Number 122 Revision Number 4 Revision Date 02/07/2023

Section 1. Identification

Product identifier: Single -Ply Membrane Bonding Adhesive

- Trade name: Royal Edge Universal Sovlent Based Bonding Adhesive
- Product Code: BASU5G
- Relevant identified uses of the substance or mixture: Contact adhesive used for adhereing single-ply membranes to approved insulations, substrates and other surfaces in low slope roofing applications. Not to be used indoors or in unventilated confined areas.

Details of the supplier of the safety data sheet Manufacturer/Supplier

Roofing Products International, Inc.

2500 Dewitt St.

Elkhart, IN 46517-1078

Emergency telephone number: ChemTrec: UNITED STATES 1(800)424-9300

Section 2. Hazard(s) Identification

Classification of the substance or mixture



GHS02 Flame

• Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Muta 1B H340 May cause genetic defects.

• Carc 1A H350 May cause cancer.

• Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

• Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

• STOT SE 3 H336 May cause drowsiness or dizziness.

Label elements

- Hazard pictograms
- GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)



GHS02



GHS07



Signal word: DANGER

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Hazard statements:

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

Harmful if swallowed.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May be fatal if swallowed and enters airway.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Do no handle until all safety precautions have been read and understood.

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames. Do not smoke.

Do not use in areas without proper ventilation.

Use explosion-proof electrical/ventilating/lighting/equipment.

IF ON SKIN (or hair): Remove/Takeoffimmediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store in secured area.

If swallowed, immediately call a poison center/doctor.

DO NOT induce vomiting.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Wear protective gloves/protective clothing/eye and face protection.

If skin or eye irritations occurs, seek medical attention.

Classification system

• NFPA ratings (scale 0 - 4)



Health = 2 Fire = 3 Reactivity = 0

• HMIS-ratings (scale 0 - 4)



Health = *2

Fire = 3

 $Physical\ Hazard=0$

Other hazards

- Results of PBT and vPvB assessment
- **PBT**: Not applicable.
- *vPvB*: Not applicable.

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Section 3. Composition/Information on Ingredients

- Chemical characterization: Mixtures
- Description:

Mixture of the substances listed below with nonhazardous additions.

Dangerous components

CAS	Components	
64741-84-0	Naphtha (petroleum), solvent-refined light (textile spirits)	25-50%
108-88-3	toluene	25-50%
67-64-1	acetone	5-20%
25085-50-1	Formaldehyde, polymer with 4-(1, 1 dimethylethyl) phenol	2.5-10%
1309-48-4	magnesium oxide	-2.5%
1314-13-2	zinc oxide	-1%

Section 4. First-Aid Measures

Description of first aid measures

• After inhalation:

Remove victim to area of fresh air and maintain comfortable breathing position. Supply fresh air or oxygen. If necessary, provide artificial respiration by trained personnel. Contact physician. In case of unconsciousness, place patient in a stable side position for transportation.

• After skin contact:

Remove with rubbing alcohol and immediately wash with water and soap and rinse thoroughly.

- After eye contact: Check for and remove contact lenses. Rinse opened eye for 20 minutes under clean, running water. Call a physician immediately.
- After swallowing:

Seek immediate medical treatment. Remove dentures. Do not induce vomiting. Maintain an open airway.

Information for doctor

Most important symptoms and effects, both acute and delayed Symptoms and Potential Acute Effects

• Eye Contact:

Causes serious eye irritation.

• Inhalation:

Irritation to lungs and mucous membranes.

• Skin Contact:

Causes skin irritation.

• Ingestion:

Irritating to mouth, throat, and lungs.

Over-exposure Symptoms

• Eye Contact:

Pain, irritation, watering, and redness.

Inhalation:

Dizziness, nausea or vomiting. Sensitive individuals may experience nose or throat irritation with prolonged exposure to fumes or vapors.

• Skin Contact:

Irritation and redness.

• Ingestion:

Dizziness, nausea or vomiting.

Indication of any immediate medical attention and special treatment needed

Contact poison treatment specialist if large quantities are inhaled or ingested.

Specific Treatment: No Specific treatment.

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Section 5. Fire-Fighting Measures

Extinguishing media

• Suitable extinguishing agents:

CO2, sand, extinguishing powder, or foam. Do not use water.

• For safety reasons unsuitable extinguishing agents: Water.

Advice for firefighters

• Hazardous Thermal Decomposition Products:

Toxic gases or vapors such as Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, Sulfur Dioxide, and partially burned Carbon.

• Protective equipment:

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus.

* | Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

• Environmental precautions:

Do not allow to enter sewers/surface or ground water.

Prevent seepage into sewage system, work-pits and cellars.

Inform respective authorities in case of seepage into water course or sewage systems.

• Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste in accordance with federal state and local regulations.

Ensure adequate ventilation.

Do not flush with water or aqueous cleaning agents.

Small Spills:

Absorb using inert material. Use non-sparking tools. Transfer the material into secure containers for proper disposal. Wear the appropriate protective clothing and equipment. Ensure adequate ventilation.

• Large Spills:

1536/35/4

Same as small spills.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

/kpe oxide

Protective A	ction Criteria for Chemicals	
RCE/3<		
108-88-3	toluene	67 ppm
67-64-1	acetone	200 ppm
1309-48-4	magnesium oxide	30 mg/m ²
1536/35/4	/kpe oxide	10 mg/m
<i>RCE/2</i> <		
108-88-3	toluene	560 ppm
67-64-1	acetone	3200 ppm*
1309-48-4	magnesium oxide	120 mg/m^3

RCE/3<		
108-88-3	toluene	3700* ppm
67-64-1	acetone	5700* ppm
1309-48-4	magnesium oxide	730 mg/m^3
1536/35/4	kpe oxide	$2,500 \text{ mg/m}^3$

 15 mg/m^3

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Section 7. Handling and Storage

Handling

• Precautions for safe handling

Ensure proper air ventilation/exhaust at the workplace.

Open and handle receptacle with care.

Under normal handling conditions, protective gloves, glasses, and clothing are adequate.

Prevent formation of aerosols

• Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges by grounding objects prone to static electricity.

Keep work area free from open flames, sparks, and hot metal surfaces.

Use non sparking tools and explosion proof electrical equipment.

Do not open containers in confined areas that restrict adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage

• Requirements to be met by storerooms and receptacles:

Store in a cool dry location away from direct heat. Store in unopened original containers.

• Information about storage incompatabilities in one common storage facility:

Store as flammable liquid.

Store away from oxidizing agents.

• Further information about storage conditions:

Keep receptacle tightly sealed.

Specific end use(s)

No further relevent information available.

Section 8. Exposure Controls/Personal Protection

• Additional information about design of technical systems: No further data; see item 7. Control parameters

Components with limit values that	t require monitoring at the workplace
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108-88	3-3 toluene
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm
TLV	Long-term value: 75 mg/m³, 20 ppm BEI
67-64-	1 acetone
PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm Long-term value: (1188) NIC-594 mg/m³, (500) NIC-250 ppm BEI
1309-4	18-4 magnesium oxide
PEL	Long-term value: 15* mg/m³ fume; *total particulate
TLV	Long-term value: 10 mg/m³ *as inhalable fraction

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1314-1	3-2 zinc oxide			
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction and fume			
REL	Short-term value: 10** mg/m³ Long-term value: 5 mg/m³ Ceiling limit value: 15*mg/m³ *dust only ** fume			
TLV	Short-term value: 10* mg/m³ Long-term value: 2* mg/m³ *as respirable fraction			

Ingr	Ingredients with biological limit values:		
108-88	8-3 toluene		
BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene		
	0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene		
	0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)		
67-64	-1 acetone		
BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)		

110-5	4-3 n-hexane				
PEL	Long-term value: 1800 mg/m³, 500 ppm				
REL	Long-term value: 180 mg/m³, 50 ppm				
TLV Long-term value: 176 mg/m³, 50 ppm					
	Skin; BEI				
110-8	2-7 cyclohexane				
PEL	Long-term value: 1050 mg/m³, 300 ppm				
REL	Long-term value: 1050 mg/m³, 300 ppm				
TLV	Long-term value: 344 mg/m³, 100 ppm				

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142-82-5 heptane

PEL Long-term value: 2000 mg/m³, 500 ppm REL Long-term value: 350 mg/m³, 85 ppm

Ceiling limit value: 1800* mg/m³, 440* ppm

*15-min

TLV Short-term value: 2050 mg/m³, 500 ppm Long-term value: 1640 mg/m³, 400 ppm

• Additional information:

The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment (see listings below)

• General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Store protective clothing separately

• Breathing equipment:

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

Protection of hands



Protective gloves

The glove material must be impermeable and resistant to the product/ the substance/ the preparation.

• Material of gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and therefore has to be checked prior to the application.

• Penetration time of glove material

The glove manufacturer must determine and adhere to the exact break through time of the protective gloves.

Eye protection



Tightly Sealed Safety glasses with side shields.

Body protection

Protective work clothing should be worn. Where static electricity is a concern, anti-static boots and gloves may be worn.

• Breathing equipment:

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

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Section 9. Physical and Chem	nical Properties
Information on basic physical and	chemical properties
General Information Appearance	
• Form:	Liquid
• Color:	Yellow
• Odor:	Strong aromatic odor
Change in condition	
• Melting point:	Undetermined.
• Boiling point:	98 °C (208.4 °F)
• Flash point:	-18 °C (-0 °F)
• Ignition temperature:	240.0 °C (464 °F)
Auto igniting:	Product is not selfigniting.
• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
Flammable limits	
• Lower:	1.2 Vol %
• Upper:	13.0 Vol %
• Vapor pressure at 20 °C (68 °F):	233.0 hPa (174.8 mm Hg)
Specific gravity:	0.839
• Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
• Solubility in / Miscibility with Water:	Not miscible or difficult to mix.

78.0%

22.0%

VOC = 634 g/L

SCAQMD RŨLE 1168 METHOD

WEIGHTPER GALLON= 6.98 LBS NOTICE THIS PRODUCT DOES NOT COMPLY WITH THE REQUIREMENT OF RULE 1168 OF CALIFORNIA'S SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - 637 G/L

Section 10. Stability and Reactivity

Reactivity No further relevant information available.

Chemical stability

• Organic solvents: • Solids content:

Other information

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

• Possibility of hazardous reactions:

Strong oxidizers, acids and bases.

Conditions to avoid:

No further relevant information available.

Incompatible materials:

No further relevant information available.

• Hazardous decomposition products:

Oxides of carbon, nitrogen and hydrocarbons, hydrogen chloride (thermal degradation products). (Contd. on page 9)

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* Section 11. Toxicological Information

Information on toxicological effects

• Acute toxicity:

LD/LC50 values that are relevant for classification				
108-88-3 toluene				
Oral	LD50	5,000 mg/kg (rat)		
Dermal	LD50	12,124 mg/kg (rabbit)		
Inhalative	LC50/4 h	5,320 mg/l (mouse)		

Primary irritant effect

- On the skin: Irritant to skin and mucous membranes.
- On the eye: Irritating effect. Vapors may cause irritation.
- Sensitization: No sensitizing effects known.

Additional toxicological information

The product shows the following dangers according to internally approved calculation methods for preparations:

- Harmful
- Irritant
- *May cause reproductive harm.*

Carcinogenic categories

IARC (Inter	rnational Agency for Research on Cancer)	
108-88-3	toluene	3
9010-98-4	Polychloroprene Polymer	3
9003-55-8	9003-55-8 1.3-butadiene-syrene block polymer	
OSHA-Ca (Occupational Safety & Health Administration)	
None oj	f the ingredients is listed.	
NTP (Natio	nal Toxicology Program)	
None oj	f the ingredients is listed.	

* Section 12. Ecological Information

Toxicity

• Aquatic toxicity:

No further relevant information available.

• Persistence and degradability:

No further relevant information available.

Behavior in environmental systems

• Bioaccumulative potential:

No further relevant information available.

• Mobility in soil:

No further relevant information available.

Ecotoxical effects

- Remark: Very toxic for fish
- Remark: Toxic for fish and other aquatic organisms

Additional ecological information

• General notes:

At present there are no ecotoxicological assessments.

Water hazard class 2 (Self-assesment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

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Danger to drinking water, even if small quantities leak into the ground.

Poisonous to fish and plankton in water bodies.

Very toxic for aquatic organisms.

Results of PBT and vPvB assessment

PBT:

Not applicable.

• vPvB:

Not applicable.

• Other adverse effects

No further relevant information available.

Section 13. Disposal Considerations

Waste treatment methods

• Recommendation:

Must be specially treated adhering to official regulations.

Do not dispose with household garbage.

Do not allow product into sewage or other wast water systems.

Uncleaned packagings

• Recommendation:

Disposal must be made according to official regulations.

Section 14. Transport Information

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• DOT, ADR, IMDG, IATA

UN1133

UN proper shipping name

• DOT, IMDG, IATA

ADHESIVES 1133

ADR

ADHESIVES

• Transport hazard class(es)

DOT





Class

3 Flammable liquids.

• Label

3

IMDG





Class

3 Flammable liquids

Label

3

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IATA		
• Class • Label	3 Flammable liquids	
Packing group • DOT, ADR, IMDG, IATA	II	
Environmental hazards:	Product contains environmental hazardous substances: Naphtha (petroleum), solvent-refined light	
Marine pollutant:	Yes (DOT)	
• Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)	
Special precautions for user	Warning: Flammable liquids	
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	
• UN "Model Regulation"	UN1133, ADHESIVES, 3, II	
Transport/Additional information:		
• DOT		
• Remarks:	Special marking with symbol (fish and tree).	

* Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Sara		
• Section 355 (extremely hazardous substances):		
None of the ingredients is listed.		
• Section 313 (Specific toxic chemical listings):		
108-88-3	toluene	
1314-13-2	zinc oxide	
• TSCA (Toxic Substances Control Act):		
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.		
Hazardous Air Pollutants		
108-88-3	toluene	

Proposition 65

Contact H.B. Fuller for more information regarding Proposition 65 on this product. reg.request@hbfuller.com.

(DSL) Canada Domestic Substance List

All components of this product are on the DSL (Canada Domestic Substance list) or are exempt from DSL requirements.

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New Jerse	y Right-to-Know List:	
108-88-3	toluene	
67-64-1	acetone	
1309-48-4	magnesium oxide	
1536/35/4	kpe oxide	
New Jerse	y Special Hazardous Substance List<	
108-88-3	toluene	TE, F3
67-64-1	acetone	F3
Pennsylva	nia Right-to-Know List:	_
108-88-3	toluene	
67-64-1	acetone	
1309-48-4	magnesium oxide	
1536/35/4	/kpe oxide	
Pennsylva	nia Special Hazardous Substance List<	_
108-88-3	toluene	
67-64-1	acetone	
1314-13-2	zinc oxide	
Canceroge	enity categories	
EPA (Env	ironmental Protection Agency)	
108-88-3	toluene	II
67-64-1	acetone	I
1314-13-2	zinc oxide	D, I
TLV (Thre	shold Limit Value established by ACGIH)	
108-88-3	toluene	
67-64-1	acetone	
1309-48-4	magnesium oxide	
MAK (Ger	man Maximum Workplace Concentration)	
None of the i	ngrediants is listed.	
NIOSH-C	a (National Institute for Occupational Safety and	Health)
	ngrediants is listed.	
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National regulations:

- Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Chemical safety assessment: A chemical assessment has not been carried out.

Section 16. Other Information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Roofing Products International, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Roofing Products International, Inc. or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS. (Contd. on page 13)

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Department issuing SDS: Technical Services Department.

Creation Date: 08/12/2000

Date of preparation: 02/07/2023

Last revision: Format update, Revision 4

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

End of SDS