



Roofing Products International, Inc.

Article Number 119

## Safety Data Sheet

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Revision Number 2

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Revision Date 01/23/2015

### \* Section 1. Identification

**Product identifier: Single -Ply Membrane Bonding Adhesive**

- **Trade name: Royal Edge Low VOC Bonding Adhesive (Solvent Based)**
- **Product Code: BAS5GLV**
- **Relevant identified uses of the substance or mixture:** Contact adhesive used for adhering 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.  
57460 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

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



GHS07

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**

**GHS label elements:**

- The product is classified and labeled according to the Globally Harmonized System (GHS)

**Hazardous pictograms**



GHS02

GHS07

GHS08

**Signal word: DANGER**

- **Hazard statements**

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging fertility or the unborn child.

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May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

## Precautionary statements

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/Take off immediately 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.

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

## 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.

## \* Section 3. Composition/Information on Ingredients

### Chemical characterization: Mixtures

- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components:

	Naphtha (petroleum), solvent-refined light (textile spirits)	
540-88-5	tert-butyl acetate	25-50%
79-20-9	methyl acetate	10-25%
67-64-1	acetone	2.5-10%
108-88-3	toluene	2.5-10%
	phenolic resin	2.5-10%

## \* 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

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- **After swallowing:** Seek immediate medical treatment. Remove dentures. Drink 1-2 glasses of water but do not induce vomiting. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs, keep head below hips to prevent aspiration.

## 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.

## \* Section 5. Fire-Fighting Measures

### Extinguishing media

- **Suitable extinguishing agents:** CO<sub>2</sub>, 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.
- **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.
- **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:** 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.

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## \* Section 7. Handling and Storage

### Handling

- **Precautions for safe handling**

Ensure proper air ventilation/exhaust at the workplace. Prevent formation of aerosols. Avoid breathing headspace vapors. Open and handle receptacle with care. Under normal handling conditions, protective gloves, glasses, and clothing are adequate.

- **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 incompatibilities 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 relevant 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 require monitoring at the workplace:

##### 540-88-5 tert-butyl acetate (25-50%)

PEL	Long-term value: 950 mg/m <sup>3</sup> , 200 ppm
REL	Long-term value: 950 mg/m <sup>3</sup> , 200 ppm
TLV	Long-term value: 950 mg/m <sup>3</sup> , 200 ppm

##### 79-20-9 methyl acetate (10-25%)

PEL	Long-term value: 610 mg/m <sup>3</sup> , 200 ppm
REL	Short-term value: 760 mg/m <sup>3</sup> , 250 ppm Long-term value: 610 mg/m <sup>3</sup> , 200 ppm
TLV	Short-term value: 757 mg/m <sup>3</sup> , 250 ppm Long-term value: 606 mg/m <sup>3</sup> , 200 ppm

##### 67-64-1 acetone (2.5-10%)

PEL	Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 590 mg/m <sup>3</sup> , 250 ppm
TLV	Short-term value: (1782) NIC-1187 mg/m <sup>3</sup> , (750) NIC-500 ppm Long-term value: (1188) NIC-475 mg/m <sup>3</sup> , (500) NIC-200 ppm BEI

##### 108-88-3 toluene (2.5-10%)

PEL	Long-term value: 200 ppm Ceiling limit value: 300;-500* ppm *10-min peak per 8-hr shift
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REL	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm
TLV	Long-term value: 75 mg/m <sup>3</sup> , 20 ppm BEI
<b>Ingredients with biological limit values:</b>	
<b>67-64-1 acetone (2.5-10%)</b>	
BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
<b>108-88-3 toluene (2.5-10%)</b>	
BEI	0.02 mg/L Medium: urine 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: <i>o</i> -Cresol with hydrolysis (background)

- **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), Chloroprene rubber (CR). 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.

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- **Eye protection:** (Contd. of page 5)



Safety glasses with side shields.

- **Body protection:** Protective work clothingshould be worn. Where static electricity is a concern, anti-static boots and gloves may be worn.

## \* Section 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

- **General Information**
- **Appearance:**
- **Form:** Liquid
- **Color:** Amber
- **Odor:** Characteristic
- **Odor Threshold:** Not determined

### Change in condition

- **Melting point:** Undetermined.
- **Boiling point:** 55° C (131° F)
- **Flash point:** -19° C (-2° F)
- **Ignition temperature:** 455° C (851° 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:** 3.1 Vol %
- **Upper:** 16.0 Vol %
- **Vapor pressure at 20 °C (68 °F):** 220.0 hPa (165 mm Hg)
- **Specific gravity:** 0.92 g/cm<sup>3</sup>, (7.677 lbs/gal)
- **Relative density** not determined
- **Vapour density** not determined
- **Evaporation rate** not determined

- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Not determined

### Viscosity

- **Dynamic:** Not determined
- **Kinematic:** Not determined

### Solvent Content

- **Organic solvents:** 81.0%
- **Solids content:** 19.0%

### Other information

**Weight per gallon:** 7.7 lbs  
**VOC SCAQMD:** 245 g/l

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## \* Section 10. Stability and Reactivity

### Reactivity

#### Chemical stability

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** All ignition sources including sparks, hot surfaces, open flames, and any areas where static electricity may occur. Areas where vapors or fumes may build up. Do not use in a confined space without adequate ventilation.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
Oxides of carbon, nitrogen and hydrocarbons, hydrogen chloride (thermal degradation products).

## \* Section 11. Toxicological Information

### Information on toxicological effects

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

#### 108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritating effect. Vapors may be irritating to the eyes.
  - **Sensitization:** No sensitizing effects known.

### Additional toxicological information

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

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

### Carcinogenic categories

#### IARC (International Agency for Research on Cancer)

108-88-3 | toluene

3

#### NTP (National Toxicology Program)

None of 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.

### Ecotoxicological effects

- **Remark:** Toxic for fish
- **Remark:** Toxic for fish and other aquatic organisms

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## Additional ecological information

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- **General notes:** At present there are no ecotoxicological assessments.
- **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.

### Uncleaned packagings

- **Recommendation:** Disposal must be made according to official regulations.

## \* Section 14. Transport Information

### UN-Number

- **DOT, ADR, IMDG, IATA** UN1133

### UN proper shipping name

- **DOT** Adhesives
- **ADR** 1133 Adhesives
- **IMDG, IATA** ADHESIVES

### Transport hazard class(es)

- **DOT**



- **Class** 3 Flammable liquids.
- **Label** 3

### ADR, IMDG, IATA



- **Class** 3 Flammable liquids
- **Label** 3

### Packing group

- **DOT, ADR, IMDG, IATA** II

- **Environmental hazards:** Not applicable.

### Special precautions for user

Warning: Flammable liquids

- **Danger code (Kemler):** 33
- **EMS Number:** F-E, S-E

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **UN "Model Regulation":** UN1133, ADHESIVES, 3, II

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## \* Section 15. Regulatory Information

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

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

108-88-3 | toluene

- **TSCA (Toxic Substances Control Act):**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

### Proposition 65

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity:**

108-88-3 | toluene

### (DSL) Canada Domestic Substance List

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

### Carcinogenicity categories

- **EPA (Environmental Protection Agency)**

67-64-1 | acetone

I

108-88-3 | toluene

II

- **TLV (Threshold Limit Value established by ACGIH)**

108-88-3 | toluene

A4

67-64-1 | acetone

A4

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety and Health Administration)**

None of the ingredients is listed.

### National regulations

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **Chemical safety assessment:** A Chemical Safety 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.

- **Department issuing MSDS:** Technical Services Department.
- **Creation Date:** 08/12/2000

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- **Date of preparation:** 03/21/2007
- **Last revision:** Formate update
- **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