

* **Section 1. Identification**

Product identifier

- **Trade name:** Royal Edge Bonding Adhesive
- **Relevant identified uses of the substance or mixture:** Construction

Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:**

Roofing Products International, Inc.
57460 Dewitt St.
Elkhart, IN 46517-1078

- **Information department:** Technical Services Department.

Emergency telephone number:

ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 703-527-3887

* **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.
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.



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



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).

Hazard pictograms



GHS02



GHS07



GHS08



GHS09

- **Signal word:** **Danger**

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Hazard statements

- Highly flammable liquid and vapor.
- Causes skin irritation.
- Causes serious eye irritation.
- Suspected of damaging fertility or the unborn child.
- May cause drowsiness or dizziness.
- May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

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 when handling or using material. Do not use in areas without proper ventilation.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- IF INHALED: Remove victim to fresh air in comfortable position for breathing. Contact physician.
- 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 secure area.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system

- NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



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**

toluene	108-88-3	30-40%
Naphtha (petroleum), solvent-refined light (textile spirits)	64741-84-0	25-30%
acetone	67-64-1	10-20%

* **Section 4. First-aid measures**

Description of first aid measures

- **General information:**
Symptoms of poisoning may occur after several hours; therefore medical observation for at least 48 hours after the accident is recommended.

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After inhalation:

- Remove victim to area off fresh air and seek medical attention. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
Call a doctor immediately.

After skin contact:

- Clean with rubbing alcohol, followed immediately by washing affected area with soap and water. Remove contaminated clothing. Wash clothing before reuse.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Seek medical treatment.

Information for doctor

- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

* **Section 5. Fire-fighting measures**

Extinguishing media

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water and water with full jet

Advice for firefighters

- **Protective equipment:**
Mouth respiratory protective device.
Protective clothing and respiratory protective device.

* **Section 6. Accidental release measures**

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Prevent seepage into sewage system, workpits and cellars.
Do not allow product to reach sewage system or any water course.
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.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

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.

* **Section 7. Handling and storage**

Handling

- **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

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• **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available

Conditions for safe storage, including any incompatibilities

• **Storage:**

• **Requirements to be met by storerooms and receptacles:** Store in a cool location away from direct heat.

• **Information about storage in one common storage facility:** Store as flammable liquid.

Further information about storage conditions

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

• **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:**

108-88-3 toluene (25-50%)

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

110-54-3 n-hexane (25-50%)

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

67-64-1 acetone (5-20%)

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-475 mg/m³, (500) NIC-200 ppm

BEI

Ingredients with biological limit values:

108-88-3 toluene (25-50%)

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

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<p>0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)</p>
<p>110-54-3 n-hexane (25-50%)</p>
<p>BEI 0.4 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 2,5-Hexanedione without hydrolysis</p>
<p>67-64-1 acetone (5-20%)</p>
<p>BEI 50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)</p>

- **Additional information:** 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 has to be impermeable and resistant to the product/ the substance/ the preparation

- **Material of gloves**
 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 exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
 Safety glasses with side shields.
TIGHTLY SEALED GOGGLES
- **Body protection:** Protective work clothing

* **Section 9. Physical and chemical properties**

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

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- **Form:** Liquid
- **Color:** Yellow
- **Odor:** Characteristic

Change in condition

- **Melting point:** Undetermined.
- **Boiling point:** 98 °C (208 °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 (175 mm Hg)

- **Specific gravity:** 0.84

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

Solvent content

- **Organic solvents:** 79 %

- **Solids content:** 21 %

- **Other information**
"NOTICE: This product does not comply with the requirements of Rule 1168 of California's South Coast Air Quality Management District".
VOC: 634G/L or 5.30 LBS/GAL
SCAQMD: 634 G/L
WEIGHT PER GALLON: = 7.0 LBS

*** 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:** 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).

*** 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)

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Primary irritant effect

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitizing effect through inhalation is possible with prolonged exposure.
- **Additional toxicological information:**

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

Harmful

Irritant

Carcinogenic

Carcinogenic categories

- **IARC (International Agency for Research on Cancer)**

108-88-3	toluene	3
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- **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

Additional ecological information

- **General notes:**

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

Danger to drinking water if even small quantities leak into the ground. Toxic for aquatic organisms

Water hazard class 3 (self-assessment) : extremely hazardous for water.

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 not be disposed of together with household garbage. Do not allow product to reach sewage system.

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Uncleaned packagings

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

*** Section 14. Transport information**

- **UN-Number**
- **DOT** UN1133
- **UN proper shipping name**
- **DOT** Adhesives, containing a flammable liquid
- **Transport hazard class(es)**
- **DOT**
- 
- **Class** 3 Flammable liquids.
- **Packing group**
- **DOT** II
- **Environmental hazards:**
- **Special marking (ADR):** Symbol (fish and tree)
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** UN1133, Adhesives, ENVIRONMENTALLY HAZARDOUS, 3, II

*** 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)**

64741-84-0	Naphtha (petroleum), solvent-refined light (textile spirits)
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108-88-3	toluene
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- **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:**

64741-84-0	Naphtha (petroleum), solvent-refined light (textile spirits)
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- **Chemicals known to cause reproductive toxicity:**

Warning: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

108-88-3	toluene
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- **(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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- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

108-88-3	toluene	D
67-64-1	acetone	D

- **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 & Health Administration)**

None of the ingredients is listed.

National regulations

- **Water hazard class:** Water hazard class 3 (Self-assessment) : extremely 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 SDS:** Technical Services Department
- **Creation Date:** 03/28/2003
- **Date of preparation:** 02/27/2015
- **Last revision:** Format update
- **Abbreviations and acronyms:**
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 DOT: US Department of Transportation
 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
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: Very persistent and very bioaccumulative
 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
 Asp. Tox. 1: Aspiration hazard, Hazard Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2