

Revision Number 4

Reviewed on 05/12/2011

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1 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- · Trade name: Double Bubble Epoxy Extra Fast Setting Red Pkg Part A (04001)
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Epoxy resin adhesive
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Royal Adhesives And Sealants, LLC

2001 W. Washington Street

South Bend IN 46628-2023

- · Information department: Environment protection department.
- · Emergency telephone number: ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 703-527-3887

2 Hazards identification

· Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Irritant

Irritating to eyes and skin. May cause sensitisation by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:

Irritant

· Hazard-determining components of labelling:

Epoxy Resin

· Risk phrases:

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

Keep out of the reach of children.

Avoid contact with skin and eyes.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Wear suitable gloves and eye/face protection.

If swallowed, seek medical advice immediately and show this container or label.

· Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

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- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



2 Health = 21 Fire = 1

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

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Adhesive

| · Dangerous components: | |
|-------------------------|--|
| Epoxy Polymer | 50-100% |
| Skin Irrit. 2, H315; | H319; Skin Sens. 1, H317; Acute Tox. 5, H303 |
| Epoxy | 10-25% |
| Skin Irrit. 2, H315; | H319; Skin Sens. 1, H317 |
| 25068-38-6 Epoxy Resin | 10-25% |
| ♦ Skin Irrit. 2, H315; | Eye Irrit. 2, H319; Skin Sens. 1, H317 |

· Additional information: For the wording of the listed risk phrases refer to section 15.

4 First aid measures

- · Description of first aid measures
- · After inhalation:

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.

- · After skin contact: Immediately rinse with water.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · 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.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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Use fire fighting measures that suit the environment.

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiatory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

- · 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).

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Use only in well ventilated areas.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility:

Store away from flammable substances.

Store away from oxidizing agents.

- · Further information about storage conditions: Protect from heat and direct sunlight.
- · Specific end use(s) No further relevant information available.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

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

· Material of gloves

Nitrile rubber, NBR

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Chloroprene rubber, CR

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

| · Information on basic physical and chemical properties | | |
|---|---|--|
| · General Information | | |
| · Appearance: | | |
| Form: | Liquid | |
| Color: | Clear | |
| · Odor: | Characteristic | |
| · Change in condition | | |
| Melting point: | Undetermined. | |
| Boiling point: | Undetermined. | |
| · Flash point: | 191°C (376 °F) | |
| · Auto igniting: | Product is not selfigniting. | |
| · Danger of explosion: | Product does not present an explosion hazard. | |
| · Specific gravity at 20°C (68 °F) | : 1.19 g/cm³ (9.931 lbs/gal) | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Solvent content: | | |
| Organic solvents: | 0.0 % | |
| VOC (Per EPA 24) | 5.04 GMS/L | |

10 Stability and reactivity

Solids content: · Other information

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

No further relevant information available.

· Possibility of hazardous reactions Reacts with strong oxidizing agents.

100.0 %

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Reacts with oxidizing agents.
- · Hazardous decomposition products:

Carbon monoxide

Carbon dioxide

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Aldehydes

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

Epoxy Polymer

Oral LD50 >4000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitizing effect by skin contact is possible with prolonged exposure.
- · Additional toxicological information:

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

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

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: Harmful to fish
- · Additional ecological information:
- · General notes:

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

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

Harmful to aquatic organisms

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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: Dispose of packaging according to regulations on the disposal of packagings.

| 4 Transport information | |
|--|--|
| · UN-Number · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA · Class | Void |
| · Packing group · DOT, ADR, IMDG, IATA | Void |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex MARPOL73/78 and the IBC Code | : II of Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN ''Model Regulation'': | - |

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):

None of the ingredients is listed.

· 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:

None of the ingredients is listed.

· (DSL) Canada Dosmestic Substance List

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

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

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· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients listed.

· 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.

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard-determining components of labelling:

Epoxy Resin

· Risk phrases:

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Special labeling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

- · 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.

16 Other information

Although the information and recommendations set forth in this MSDS are presented in good faith and are believed to be correct as of the date of this MSDS, Royal Adhesives & Sealants 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 Royal Adhesives & Sealants 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 MSDS.

- · Department issuing MSDS: Environment protection department.
- · 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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

USA