

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

1 Identification of substance

- **Product details**
- **Trade name:** Rescon Segmental Bridge Epoxy Adhesive Part B
- **Article number:** 308664B
- **Application of the substance / the preparation**
- **Manufacturer/Supplier:**
Symons
4226 Kansas Avenue
Kansas City, KS 66106

Tel.: (877) 854-0643

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call (703) 527-3887. Collect calls are accepted.

- **Information department:** Environmental, Health, and Safety department.

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

471-34-1	calcium carbonate	10-25%
100-51-6	Benzyl alcohol	10-25%
15520-10-2	2-methylpentane-1,5-diamine	10-25%
1477-55-0	m-phenylenebis(methylamine)	10-25%
6864-37-5	2,2'-dimethyl-4,4'methylenebis(cyclohexylamine)	10-25%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	≤ 5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:** May cause eye and skin irritation. Prolonged contact may cause sensitization.
- **Information pertaining to particular dangers for man and environment:**
The product has to be labelled due to internationally acknowledged calculation procedures using the latest valid versions.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = 3
FIRE	1	Fire = 1
PHYSICAL HAZARD	2	Reactivity = 2

USA

(Contd. on page 2)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

Trade name: Rescon Segmental Bridge Epoxy Adhesive Part B

(Contd. of page 1)

4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Seek medical treatment.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:**
Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

471-34-1 calcium carbonate

PEL	15*; 5** mg/m ³ *Total dust **Respirable fraction
REL	10*; 5** mg/m ³ *Total dust **Respirable fraction
TLV	10 mg/m ³ (e)

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

Trade name: Rescon Segmental Bridge Epoxy Adhesive Part B

(Contd. of page 2)

1477-55-0 m-phenylenebis(methylamine)

REL	Short-term value: C 0.1 mg/m ³ Skin
TLV	Short-term value: C 0.1 mg/m ³ Skin

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **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 skin.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **Protection of hands:**



Protective gloves

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

· **Eye protection:** Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

· General Information

Form:	Liquid
Color:	Grey
Odor:	Strong

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** 93°C (199°F)

· **Ignition temperature:** 275.0°C (527°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: 0.5 Vol %

Upper: 13.0 Vol %

· **Vapor pressure at 20°C (68°F):** 0.1 hPa (0 mm Hg)

· **Density at 20°C (68°F):** 1.530 g/cm³

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Solvent content:

Organic solvents: 12.5 %

(Contd. on page 4)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

Trade name: Rescon Segmental Bridge Epoxy Adhesive Part B

(Contd. of page 3)

· **Volatile Organic Compounds:** Contains 0 g/L.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:**

100-51-6 Benzyl alcohol

Oral LD50 1230 mg/kg (rat)

Dermal LD50 2000 mg/kg (rabbit)

15520-10-2 2-methylpentane-1,5-diamine

Oral LD50 1690 mg/kg (rat)

1477-55-0 m-phenylenebis(methylamine)

Oral LD50 1040 mg/kg (rat)

Inhalative LC50/4 h 2.4 mg/l (rat)

6864-37-5 2,2'-dimethyl-4,4'methylenebis(cyclohexylamine)

Oral LD50 320-460 mg/kg (rat)

Dermal LD50 200-400 mg/kg (rabbit)

Inhalative LC50/4 h 0.42 mg/l (rat)

· **Primary irritant effect:**

- **on the skin:** May cause skin irritation.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

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

12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **General notes:** Harmful to aquatic organisms

13 Disposal considerations

· **Product:**· **Recommendation:**

It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.

(Contd. on page 5)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

Trade name: Rescon Segmental Bridge Epoxy Adhesive Part B

(Contd. of page 4)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.

14 Transport information

- **DOT regulations:**
- **Hazard class:** 8
- **Identification number:** UN2735
- **Packing group:** III
- **Proper shipping name (technical name):** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOPROPYLDIETANOLAMINE)
- **Limited Quantity Exemption:** No Limited Quantity exemption applies for this shipping class.
- **U.S. Domestic Ground Shipments:** Same as listed for Standard Shipments above.
- **U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:** Same as listed for Standard Shipments above.
- **Emergency Response Guide (ERG) Number:** Not determine

- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** 8 Corrosive substances
- **Danger code (Kemler):** 886
- **UN-Number:** 2735
- **Packaging group:** III
- **Description of goods:** 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOPROPYLDIETHANOLAMINE)

- **Maritime transport IMDG:**



- **IMDG Class:** 8
- **UN Number:** 2735
- **Label:** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOPROPYLDIETANOLAMINE)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 2735
- **Label:** 8
- **Packaging group:** III
- **Proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOPROPYLDIETANOLAMINE)

USA

(Contd. on page 6)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

Trade name: Rescon Segmental Bridge Epoxy Adhesive Part B

(Contd. of page 5)

15 Regulations

- **Sara**

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

None of the ingredient is listed.

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

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

None of the ingredients is listed.

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

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to the State of California (Prop. 65) to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

- **Carcinogeny categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

14807-96-6 Talc (Mg₃H₂(SiO₃)₄)

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

14807-96-6 Talc (Mg₃H₂(SiO₃)₄)

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.

- **Product related hazard informations:**

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

- **Hazard symbols: Xi Irritant**

- **Hazard-determining components of labelling:**

Benzyl alcohol

2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)

2-methylpentane-1,5-diamine

m-phenylenebis(methylamine)

(Contd. on page 7)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

Trade name: Rescon Segmental Bridge Epoxy Adhesive Part B

(Contd. of page 6)

· Risk phrases:

- 37/38 Irritating to respiratory system and skin.
- 41 Risk of serious damage to eyes.
- 43 May cause sensitisation by skin contact.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 13 Keep away from food, drink and animal feedingstuffs.
- 20 When using do not eat or drink.
- 25 Avoid contact with eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 27 Take off immediately all contaminated clothing.
- 36/39 Wear suitable protective clothing and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 64 If swallowed, rinse mouth with water (only if the person is conscious).

· National regulations:

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Environmental, Health & Safety Department
- **Contact:** Environmental, Health & Safety Manager

USA