

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

1 Identification of substance

- **Product details**

- **Trade name:** Rescon Injection Resin - Part B

- **Article number:** 275697B

- **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:**

140-31-8	2-piperazin-1-ylethylamine	25-50%
694-83-7	cyclohex-1,2-ylenediamine	10-25%
84852-15-3	4-nonylphenol, branched	≤ 10%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	≤ 10%

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

3 Hazards identification

- **Hazard description:** Not applicable.

- **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)**



Health = 3

Fire = 1

Reactivity = 1

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

HEALTH	3
FIRE	1
PHYSICAL HAZARD	1

Health = 3

Fire = 1

Reactivity = 1

USA

(Contd. on page 2)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 1)

4 First aid measures

- **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **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:**

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

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).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

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:** Store in a cool dry location.

- **Information about storage in one common storage facility:** Store away from incompatible materials.

- **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.

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 2)

· **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.

· **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 eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **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 has therefore 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:** Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

· **General Information**

Form:	Liquid
Color:	According to product specification
Odor:	Distinctive

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** > 94°C (> 201°F)

· **Ignition temperature:** 315.0°C (599°F)

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

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

· **Explosion limits:**

Lower: 2.1 Vol %

Upper: 10.5 Vol %

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

(Contd. on page 4)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 3)

- | | |
|---|--------|
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| · Solids content: | |
| | 56.0 % |
| · Volatile Organic Compounds: Not determined | |

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:**

140-31-8 2-piperazin-1-ylethylamine

Oral	LD50	2140 mg/kg (rat)
Dermal	LD50	880 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

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

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **Ecotoxicological effects:**

- **Remark:** Toxic for fish

- **General notes:**

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

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

13 Disposal considerations

- **Product:**

- **Recommendation:**

Must not be disposed of as normal garbage. Do not allow product to reach sewage system.

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 4)

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.

- **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. (N-(3-aminopropyl)iminodiethanol)
- **Label:** 8
- **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):** 86
- **UN-Number:** 2735
- **Packaging group:** II
- **Description of goods:** 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (N-(3-aminopropyl)iminodiethanol)

· Maritime transport IMDG:



- **IMDG Class:** 8
- **UN Number:** 2735
- **Label:** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No

(Contd. on page 6)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 5)

· **Propper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (N-(3-aminopropyl)iminodiethanol)

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



· **ICAO/IATA Class:** 8
 · **UN/ID Number:** 2735
 · **Label:** 8
 · **Packaging group:** III
 · **Propper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (N-(3-aminopropyl)iminodiethanol)

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)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

(Contd. on page 7)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 6)

· **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:**

C Corrosive

N Dangerous for the environment

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

2-piperazin-1-ylethylamine

cyclohex-1,2-ylenediamine

4-nonylphenol, branched

· **Risk phrases:**

21/22 Harmful in contact with skin and if swallowed.

34 Causes burns.

43 May cause sensitisation by skin contact.

62 Possible risk of impaired fertility.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

63 Possible risk of harm to the unborn child.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.

13 Keep away from food, drink and animal feedingstuffs.

20 When using do not eat or drink.

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

52 Not recommended for interior use on large surface areas.

57 Use appropriate container to avoid environmental contamination.

60 This material and its container must be disposed of as hazardous waste.

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.

USA

(Contd. on page 8)

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 12/20/2007

Reviewed on 12/20/2007

Trade name: Rescon Injection Resin - Part B

(Contd. of page 7)

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