

Material Safety Data Sheet

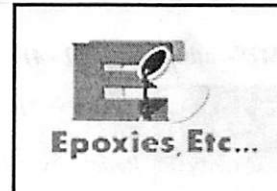
acc. to ISO/DIS 11014

Printing date 04/12/2006

Reviewed on 03/29/2006

1 Identification of substance

- **Product details**
- **Trade name:** 20-3238R
- **Article number:** Epoxy Resin Formulation
- **Manufacturer/Supplier:**
Epoxies, Etc.
21 Starline Way
Cranston, RI 02921
USA
- **Information department:** Product safety department.
- **Emergency information:** 800-255-3924



2 Composition/Data on components

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

- **Dangerous components:**

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	50-100%
84852-15-3	4-nonylphenol, branched	2.5-10%
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs	$\leq 2.5\%$

3 Hazards identification

- **Hazard description:**



Harmful
Dangerous for the environment

- **Information pertaining to particular dangers for man and environment:**

Irritating to eyes and skin.
May cause sensitisation by skin contact.
Possible risk of impaired fertility.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Possible risk of harm to the unborn child.
Only for trade users / technical specialists
Keep out of the reach of children.

- **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 = 1
Fire = 1
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = *1
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

4 First aid measures

· **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.

Call a doctor immediately.

· **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. If symptoms persist, consult a doctor.

· **After swallowing:**

If symptoms persist consult doctor.

A person vomiting while lying on their back should be turned onto their side.

DO NOT attempt to give anything by mouth to an unconscious person.

5 Fire fighting measures

· **Suitable extinguishing agents:**

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

Use fire fighting measures that suit the environment.

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· **Person-related safety precautions:**

Wear protective clothing.

Keep people at a distance and stay upwind.

· **Measures for environmental protection:**

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

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:**

Send for recovery or disposal in suitable receptacles.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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7 Handling and storage

- **Handling:**
- **Information for safe handling:**
 - Store in cool, dry place in tightly closed receptacles.
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
 - Store at ambient temperature 25 C.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - Store only in the original receptacle.
 - Store indoors.
- **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:**
 - 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.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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.

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· General Information

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

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 293°C (559°F)

· **Flash point:** 154°C (309°F)· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Density:** Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Solvent content:

Organic solvents: 0.2 %
VOC content: 0.2 %
 2.5 g/l / 0.02 lb/gl

· **Solids content:** 94.8 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.
 Avoid elevated temperatures.

· **Materials to be avoided:** Strong acids, strong bases, strong oxidizers, amines, and mercaptans.· **Dangerous reactions**

Reacts with amines.
 Reacts with catalysts, oxidizing agents and strong alkali.
 Hazardous polymerization may occur if mixed with amines in large masses and/or with heat.

· **Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide
 Unknown hydrocarbons.

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11 Toxicological information

- **Acute toxicity:**

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

84852-15-3 4-nonylphenol, branched

Oral	LD50	.58 mg/kg (rat)
Dermal	LD50	2.14 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **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:** 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.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

13 Disposal considerations

- **Product:**

- **Recommendation:**

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

- **Uncleaned packagings:**

- **Recommendation:** Dispose of in accordance to all local, state, and/or national legislation.

14 Transport information

- **DOT regulations:**

- **Hazard class:** -

- **Remarks:** Not regulated.

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

- **Remarks:** Not regulated.

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

- **ICAO/IATA Class:** -

- **Remarks:** Not regulated

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15 Regulations

- **Sara**

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

None of the ingredient is listed.

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

127-18-4 tetrachloroethylene

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

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

84852-15-3 4-nonylphenol, branched

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

108-94-1 cyclohexanone

127-18-4 tetrachloroethylene

- **Proposition 65**

- **Chemicals known to cause cancer:**

127-18-4 tetrachloroethylene

- **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.

- **Carcerogenity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

108-94-1 cyclohexanone 3

127-18-4 tetrachloroethylene 2A

- **NTP (National Toxicology Program)**

127-18-4 tetrachloroethylene R

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

108-94-1 cyclohexanone A4

127-18-4 tetrachloroethylene A3

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

127-18-4 tetrachloroethylene

- **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:**

Harmful

Dangerous for the environment

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

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

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oxirane, mono[(C12-14-alkyloxy)methyl] derivs
4-nonylphenol, branched

· **Risk phrases:**

Irritating to eyes and skin.
May cause sensitisation by skin contact.
Possible risk of impaired fertility.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Possible risk of harm to the unborn child.

· **Safety phrases:**

Keep locked up and 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.
After contact with skin, wash immediately with plenty of soap and water.

· **Special labeling of certain preparations:**

Only for trade users / technical specialists
Keep out of the reach of children.

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. The information given and the recommendations made herein apply to our product alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. It is the user's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

· **Department issuing MSDS:** Product safety department.

· **Contact:** Paul C. Harrington

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