

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 10/21/2016

Revision: 10/21/2016

1 Identification

- **Product identifier**
- **Trade name:** **MM-80P**
- **Product code:** MM-80P Part A
- **Recommended use and restriction on use**
- **Recommended use:** Epoxy joint filler
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
 METZGER/McGUIRE
 Mailing Address:
 PO Box 2217
 Concord, NH 03302
 Shipping Address:
 807 Route 3-A
 Bow, NH 03304
 Phone: 603-224-6122
 Toll Free: 800-223-6680
 Email: info@metzgermcguire.com
- **Emergency telephone number:**
 ChemTel Inc.
 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements**
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07

- **Signal word:** Warning
- **Hazard statements:**
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
- **Precautionary statements:**
 P261 Avoid breathing mist, vapors, or spray.
 P264 Wash thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection.

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- (Cont'd. of page 1)
- P272 Contaminated work clothing must not be allowed out of the workplace.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P302+P352 IF ON SKIN: Wash with plenty of water.
 - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
 - P362+P364 Take off contaminated clothing and wash it before reuse.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Components:**

| | | |
|------------|---|--------|
| 25068-38-6 | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) | 30-60% |
| | ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 | |
| | Trade Secret Polyglycidyl ether | 20-40% |
| | ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1B, H317 | |

- **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
 Do not pull solidified product away from the skin.
 Immediately wash with water and soap and rinse thoroughly.
 If skin irritation or rash occurs: Get medical advice/attention.
- **After eye contact:**
 Remove contact lenses if worn, if possible.
 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
 Rinse out mouth and then drink plenty of water.
 Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
 Headache
 Breathing difficulty
 Coughing
 Allergic reactions
 Irritant to skin and mucous membranes.
 Irritant to eyes.
 Nausea in case of ingestion.

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Gastric or intestinal disorders when ingested.
 Vomiting.
 Diarrhea.
 · **Danger:** Danger of impaired breathing.
 · **Indication of any immediate medical attention and special treatment needed:**
 Medical supervision for at least 48 hours.
 Contains reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700). May produce an allergic reaction.
 Treat skin and mucous membrane with antihistamine and corticoid preparations.
 If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 Water fog / haze
 Foam
 Gaseous extinguishing agents
 Fire-extinguishing powder
- **For safety reasons unsuitable extinguishing agents:** Water spray
- **Special hazards arising from the substance or mixture**
 Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
 Wear self-contained respiratory protective device.
 Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 Ensure adequate ventilation.
 Use personal protective equipment as required.
- **Environmental precautions**
 Do not allow to enter sewers/ surface or ground water.
 Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up**
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Do not allow to dry out
 Send for recovery or disposal in suitable receptacles.
- **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.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 Use only in well ventilated areas.
 Prevent formation of aerosols.
 Keep out of reach of children.
 Avoid contact with the eyes and skin.
- **Information about protection against explosions and fires:**
 Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**
 Store away from foodstuffs.
 Store away from oxidizing agents.
 Do not store together with acids.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **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.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 The usual precautionary measures for handling chemicals should be followed.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
 Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
 Nitrile rubber, NBR

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 PVC gloves
 · **Eye protection:**


Safety glasses

 · **Body protection:** Protective work clothing
 · **Limitation and supervision of exposure into the environment**
 Avoid release to the environment.

9 Physical and chemical properties

 · **Information on basic physical and chemical properties**

 · **Appearance:**

| | |
|--------------------------|-----------------|
| · Form: | Liquid |
| · Color: | Gray |
| · Odor: | Sweetish |
| · Odor threshold: | Not determined. |

| | |
|---------------------------------------|-----------------|
| · pH-value: | Not determined. |
| · Melting point/Melting range: | Not determined. |
| · Boiling point/Boiling range: | Not determined. |

| | |
|-----------------------|------------------|
| · Flash point: | >93 °C (>199 °F) |
|-----------------------|------------------|

| | |
|---|-----------------|
| · Flammability (solid, gaseous): | Not applicable. |
|---|-----------------|

| | |
|-------------------------------------|-----------------|
| · Auto-ignition temperature: | Not determined. |
|-------------------------------------|-----------------|

| | |
|-------------------------------------|-----------------|
| · Decomposition temperature: | Not determined. |
|-------------------------------------|-----------------|

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

 · **Explosion limits**

| | |
|--------------------------------|-----------------|
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Oxidizing properties: | Not determined. |

| | |
|--------------------------|-----------------|
| · Vapor pressure: | Not determined. |
|--------------------------|-----------------|

 · **Density:**

| | |
|---|---|
| · Relative density at 20 °C (68 °F): | 1.24 g/cm ³ (10.348 lbs/gal) |
| · Vapor density: | Not determined. |
| · Evaporation rate: | Not determined. |

 · **Solubility in / Miscibility with**

| | |
|-----------------|-----------------------------------|
| · Water: | Not miscible or difficult to mix. |
|-----------------|-----------------------------------|

| | |
|---|-----------------|
| · Partition coefficient (n-octanol/water): | Not determined. |
|---|-----------------|

 · **Viscosity**

| | |
|---------------------|-----------------|
| · Dynamic: | 3000-7000 cPs |
| · Kinematic: | Not determined. |

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 · **Other information**

No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
 No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
 Exothermic polymerization.
 Reacts with oxidizing agents.
 Reacts with strong acids and alkali.
 Reacts with peroxides and other radical forming substances.
- **Conditions to avoid**
 Store away from oxidizing agents.
 Avoid acids.
 Excessive heat.
- **Incompatible materials** Oxidizers, strong bases, strong acids
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

 · **Information on toxicological effects**

 · **Acute toxicity:**

 · **LD/LC50 values that are relevant for classification:**
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

| | | |
|--------|------|---------------------------|
| Oral | LD50 | >2000 mg/kg (rat, female) |
| Dermal | LD50 | >2000 mg/kg (rat) |

 · **Primary irritant effect:**

- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

 · **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

 · **NTP (National Toxicology Program):**

None of the ingredients are listed.

 · **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

 · **Probable route(s) of exposure:**

 Ingestion.
 Inhalation.
 Eye contact.

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- Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** Irritating if inhaled, causing symptoms of coughing and shortness of breath. Danger through skin absorption.
- **Repeated dose toxicity:** No relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity**
Toxic to aquatic life with long lasting effects.

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

| | |
|------|---------------------------------------|
| EC50 | 2.7 mg/kg (daphnia) (48hr) |
| LC50 | 1.2 mg/l (Oncorhynchus mykiss) (96hr) |
| | 2.4 mg/l (zebra fish) (96hr) |

- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

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

14 Transport information

- **UN-Number**
 - **DOT**
 - **ADR, IMDG, IATA**
- Not regulated.
UN3082
- **UN proper shipping name**
 - **DOT**
 - **ADR, IMDG**
 - **IATA**
- Not regulated.
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL-A EPOXY RESIN)
Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A epoxy resin)
- **Transport hazard class(es)**
 - **DOT**
 - **Class**
 - **ADR**
- Not regulated.
-
- **Class**
 - **Label**
- 9 (M6) Miscellaneous dangerous substances and articles
9
-
- **IMDG, IATA**
-
- **Class**
 - **Label**
- 9 Miscellaneous dangerous substances and articles
9
- **Packing group**
 - **DOT**
 - **ADR, IMDG, IATA**
- Not regulated.
III
- **Environmental hazards**
- Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)
- **Marine pollutant:**
Symbol (fish and tree)
- **Special precautions for user**
- Warning: Miscellaneous dangerous substances and articles

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| | |
|--|--|
| · Danger code (Kemler): | 90 |
| · EMS Number: | F-A,S-F |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not regulated when carried in single or combination packaging containing a net quantity of 5L or less for liquids or 5 kg or less for solids per the following: DOT: 171.4(c)(2) ADR: SP 375 IMDG: 2.10.2.7 IATA: special provision A197 |
| · DOT | |
| · Remarks: | Transport labeling is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid. |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act)

All ingredients are listed.

Proposition 65 (California)
Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

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| | |
|--|--|
| · Chemicals known to cause developmental toxicity: | None of the ingredients are listed. |
| · Carcinogenic categories | |
| · EPA (Environmental Protection Agency): | None of the ingredients are listed. |
| · IARC (International Agency for Research on Cancer): | None of the ingredients are listed. |
| · NIOSH-Ca (National Institute for Occupational Safety and Health): | None of the ingredients are listed. |
| · Canadian Domestic Substances List (DSL): | All ingredients are listed. |
| · Chemical safety assessment: | A Chemical Safety Assessment has not been carried out. |

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.

· **Date of preparation / last revision** 10/21/2016 / -

Abbreviations and acronyms:

ADR: 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
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 LDLo: Lowest Lethal Dose Observed
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
 Skin Sens. 1: Skin sensitisation – Category 1
 Skin Sens. 1B: Skin sensitisation – Category 1B

Sources

Website, European Chemicals Agency (echa.europa.eu)
 Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
 Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.
 Safety Data Sheets, Individual Manufacturers

SDS Prepared by:
 ChemTel Inc.
 1305 North Florida Avenue

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Tampa, Florida USA 33602-2902
 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
 Website: www.chemtelinc.com

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1 Identification

- **Product identifier**
- **Trade name:** **MM-80P**
- **Product code:** MM-80P Part B
- **Recommended use and restriction on use**
- **Recommended use:** Epoxy joint filler
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
 METZGER/McGUIRE
 Mailing Address:
 PO Box 2217
 Concord, NH 03302
 Shipping Address:
 807 Route 3-A
 Bow, NH 03304
 Phone: 603-224-6122
 Toll Free: 800-223-6680
 Email: info@metzgermcguire.com
- **Emergency telephone number:**
 ChemTel Inc.
 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
- Acute Tox. 4 H302 Harmful if swallowed.
- Acute Tox. 4 H312 Harmful in contact with skin.
- Acute Tox. 3 H331 Toxic if inhaled.
- Skin Corr. 1B H314 Causes severe skin burns and eye damage.
- Eye Dam. 1 H318 Causes serious eye damage.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- Muta. 2 H341 Suspected of causing genetic defects.
- Repr. 2 H361 Suspected of damaging fertility or the unborn child. Route of exposure: Oral.
- STOT SE 3 H335 May cause respiratory irritation.
- **Additional information:** H331 hazard applies to aerosolized material only.

· Label elements

- **GHS label elements**
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS05 GHS06 GHS07 GHS08

- **Signal word:** Danger

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Hazard statements:

- H302+H312 Harmful if swallowed or in contact with skin.
- H331 Toxic if inhaled.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- H361 Suspected of damaging fertility or the unborn child. Route of exposure: Oral.
- H335 May cause respiratory irritation.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P363 Wash contaminated clothing before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients
Chemical characterization: Mixtures
Components:

| | | |
|------------|---|--------|
| 84852-15-3 | 4-nonylphenol, branched ⚠ Repr. 2, H361 ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302 | 25-50% |
| | Trade Secret Amidoamine ⚠ Muta. 2, H341 ⚠ Skin Corr. 1B, H314 ⚠ Skin Sens. 1, H317; STOT SE 3, H335 | 5-20% |

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| | | |
|----------|--|-------|
| 111-40-0 | 2,2'-iminodiethylamine ⚠ Acute Tox. 2, H330 ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; STOT SE 3, H335 | 5-10% |
| 80-05-7 | bisphenol A ⚠ Repr. 2, H361 ⚠ Eye Dam. 1, H318 ⚠ Skin Sens. 1, H317; STOT SE 3, H335 | <10% |
| 100-51-6 | benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2A, H319 | <10% |
| | Trade Secret Aliphatic amine ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319 | <3% |

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures
Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Do not pull solidified product away from the skin.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation or rash occurs: Get medical advice/attention.
Seek immediate medical help for blistering or open wounds.
- **After eye contact:**
Protect unharmed eye.
Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Headache
Breathing difficulty
Coughing
Allergic reactions
Strong caustic effect on skin and mucous membranes.
May cause respiratory irritation.
Nausea in case of ingestion.
Gastric or intestinal disorders when ingested.
Vomiting.
Diarrhea.
- **Danger:**
Danger of impaired breathing.
Danger of gastric perforation.
Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.

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Toxic if inhaled.
 Suspected of damaging fertility or the unborn child. Route of exposure: Oral.
 Suspected of causing genetic defects.
 · **Indication of any immediate medical attention and special treatment needed:**
 Medical supervision for at least 48 hours.
 Contains Trade Secret Polyamido amine, 2,2'-iminodiethylamine, bisphenol A. May produce an allergic reaction.
 Treat skin and mucous membrane with antihistamine and corticoid preparations.
 If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 Water fog / haze
 Foam
 Gaseous extinguishing agents
 Fire-extinguishing powder
- **For safety reasons unsuitable extinguishing agents:** Water spray
- **Special hazards arising from the substance or mixture**
 Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
 Wear self-contained respiratory protective device.
 Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 Use respiratory protective device against the effects of fumes/dust/aerosol.
 Ensure adequate ventilation.
 Use personal protective equipment as required.
- **Environmental precautions**
 Do not allow to enter sewers/ surface or ground water.
 Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up**
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Send for recovery or disposal in suitable receptacles.
- **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.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 Use only in well ventilated areas.
 Prevent formation of aerosols.
 Keep out of reach of children.
 Avoid contact with the eyes and skin.
 Avoid breathing mist, vapors, or spray.
- **Information about protection against explosions and fires:**
 Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**
 Store away from foodstuffs.
 Store away from oxidizing agents.
 Do not store together with acids.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

| 111-40-0 2,2'-iminodiethylamine | |
|---------------------------------|--|
| REL (USA) | Long-term value: 4 mg/m ³ , 1 ppm Skin |
| TLV (USA) | Long-term value: 4.2 mg/m ³ , 1 ppm Skin |
| EL (Canada) | Long-term value: 1 ppm Skin; S |
| EV (Canada) | Long-term value: 4 mg/m ³ , 1 ppm Skin |
| LMPE (Mexico) | Long-term value: 1 ppm PIEL |
| 100-51-6 benzyl alcohol | |
| WEEL (USA) | Long-term value: 10 ppm |

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 The usual precautionary measures for handling chemicals should be followed.
 Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
 Pregnant women should strictly avoid inhalation or skin contact.

· **Engineering controls:** No relevant information available.

· **Breathing equipment:**

Use suitable respiratory protective device when aerosol or mist is formed.

Use respiratory protection when grinding or cutting material.

· **Protection of hands:**



Protective gloves

· **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

Butyl rubber, BR

· **Eye protection:**



Safety glasses

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

Avoid release to the environment.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form: Liquid

Color: Tan.

· **Odor:** Amine-like

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** >149 °C (>300 °F)

· **Flash point:** >93 °C (>199 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

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

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· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Not determined.

· **Vapor pressure:** Not determined.

· **Density:**

Relative density at 20 °C (68 °F): 1.25 g/cm³ (10.431 lbs/gal)

Vapor density: Not determined.

Evaporation rate: Not determined.

· **Solubility in / Miscibility with**

Water: Slightly soluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity**

Dynamic: 3000-6000 cPs

Kinematic: Not determined.

· **Other information** No relevant information available.

10 Stability and reactivity

· **Reactivity:** No relevant information available.

· **Chemical stability:** Stable under normal temperatures and pressures.

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

No decomposition if used and stored according to specifications.

· **Possibility of hazardous reactions**

Exothermic polymerization.

Reacts with oxidizing agents.

Reacts with strong acids and alkali.

Reacts with peroxides and other radical forming substances.

Reacts with catalysts.

· **Conditions to avoid**

Store away from oxidizing agents.

Avoid acids.

Excessive heat.

· **Incompatible materials** Oxidizers, strong bases, strong acids

· **Hazardous decomposition products**

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Ammonia

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11 Toxicological information
Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification:
111-40-0 2,2'-iminodiethylamine

| | | |
|------------|---------|---------------------|
| Oral | LD50 | 1080 mg/kg (rat) |
| Dermal | LD50 | 1090 mg/kg (rabbit) |
| Inhalative | LC50/4h | 0.3 mg/l (rat) |

80-05-7 bisphenol A

| | | |
|--------|------|---------------------|
| Oral | LD50 | 3250 mg/kg (rat) |
| Dermal | LD50 | 3000 mg/kg (rabbit) |

100-51-6 benzyl alcohol

| | | |
|--------|------|---------------------|
| Oral | LD50 | 1230 mg/kg (rat) |
| Dermal | LD50 | 2000 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.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

 Ingestion.
 Eye contact.
 Skin contact.

Acute effects (acute toxicity, irritation and corrosivity):

Irritating if inhaled, causing symptoms of coughing and shortness of breath.

Danger through skin absorption.

Toxic if inhaled.

Harmful if swallowed or in contact with skin.

Repeated dose toxicity: Possible risk of irreversible effects.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Muta. 2, Repr. 2

Germ cell mutagenicity: Suspected of causing genetic defects.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Suspected of damaging fertility or the unborn child. Route of exposure: Oral.

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

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 · **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information
Toxicity
Aquatic toxicity

Toxic to aquatic life with long lasting effects.

100-51-6 benzyl alcohol

LC50 | 460 mg/l (pimephales promelas)

 · **Persistence and degradability** No relevant information available.

 · **Bioaccumulative potential:** No relevant information available.

 · **Mobility in soil:** No relevant information available.

Additional ecological information

 · **General notes:** Avoid release to the environment.

Results of PBT and vPvB assessment

 · **PBT:** Not applicable.

 · **vPvB:** Not applicable.

 · **Other adverse effects** No relevant information available.

13 Disposal considerations
Waste treatment methods
Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

Uncleaned packagings

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

14 Transport information
UN-Number

 · **DOT, ADR, IMDG, IATA**

UN2735

UN proper shipping name

 · **DOT, IATA**

Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Polyamidoamine)

 · **ADR**

AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE, POLYAMIDOAMINE), ENVIRONMENTALLY HAZARDOUS

 · **IMDG**

AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE, POLYAMIDOAMINE), MARINE POLLUTANT

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Transport hazard class(es)
DOT

Class 8 Corrosive substances
Label 8

ADR

Class 8 (C7) Corrosive substances
Label 8

IMDG

Class 8 Corrosive substances
Label 8

IATA

Class 8 Corrosive substances
Label 8

Packing group
DOT, ADR, IMDG, IATA II

Environmental hazards Product contains environmentally hazardous substances: 4-nonylphenol, branched

Marine pollutant: Yes
 Symbol (fish and tree)

Special precautions for user Warning: Corrosive substances

Danger code (Kemler): 80

EMS Number: F-A,S-B

Segregation groups Alkalis

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

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Transport/Additional information:

Mist is not likely to be generated in a leakage of the transport container.

DOT

Product is additionally classified as a MARINE POLLUTANT based on MARPOL and DOT rules. Labeling as a MARINE POLLUTANT is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.



Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 L each.

ADR


Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 L each.

IMDG


Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 L each.

IATA


Limited Quantity for packages less than 30 kg gross and inner packagings less than 0.1 L each / 0.5 L net.

15 Regulatory information
Safety, health and environmental regulations/legislation specific for the substance or mixture
United States (USA)
SARA
Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

84852-15-3 | 4-nonylphenol, branched

80-05-7 | bisphenol A

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· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)
· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

80-05-7 | bisphenol A

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenic categories
· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

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

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Date of preparation / last revision 10/21/2016 / -

· Abbreviations and acronyms:

ADR: 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

LDLo: Lowest Lethal Dose Observed

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

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978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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