

Safety Data Sheet

Revision Date 06.21.2018

Revision: 5

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

1.1 Product identifier

Trade name: **Armor-Hard Extreme Part A**

1.2 Application of the substance / the mixture: Epoxy binder

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

Metzger/McGuire Co.

P. O. Box 2217

Concord, NH 03302

Telephone: (800) 223-6680

1.4 Emergency telephone number:

ChemTel Inc.

(800) 255-3924, +1 (813) 248-0585

2 Hazards identification

2.1 GHS Classification of the substance or mixture

Acute toxicity- Dermal: Category 4

Skin corrosion/Irritant; Category 1

Skin sensitization; Category 1

Serious eye damage/Irritant, Category 2

2.2 GHS Label elements

Hazard pictograms/symbols



Signal word: Danger

Hazard statements:

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

Precautionary statements:

P261: Avoid breathing gas/mist/vapours/spray.

P264: Wash skin thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/ physician.

P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.

P363: Wash contaminated clothing before reuse.

Additional information: Contains epoxy constituents. May produce an allergic reaction.

HMIS Rating:

Health: 3

Flammability: 1

Physical Hazard: 0

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3 Composition/information on ingredients

3.2 Mixture

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| | | |
|-----------------|-----------------------------------------------------------------------------------------------------|--------|
| CAS: 25068-38-6 | Reaction product: bisphenol - A- (epichlorhydrin) epoxy resin (number average molecular weight<700) | 60-90% |
| Trade Secret | Aliphatic Acrylic Esters | 10-30% |

In conformity with 29CFR 1910.1200(i) the specific chemical identity may be withheld as Trade Secret, while all health/safety properties and effects are included in the SDS.

4 First aid measures

4.1 Description of 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. Take affected persons out into the fresh air.

After inhalation: If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately

After skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

After eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. Call a Poison Control Center.

After swallowing: If swallowed, DO NOT induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed: Allergic reactions, Nausea, Coughing, Gastric or intestinal disorders. Irritant to skin and mucous membranes. Irritant to eyes.

4.3 Indication of any immediate medical attention and special treatment needed: Contains reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700), Reaction May produce an allergic reaction. If necessary oxygen respiration treatment.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Water haze or fog, Foam, Fire-extinguishing powder, Carbon dioxide.

For safety reasons unsuitable extinguishing agents: Water with full jet Water spray

5.2 Special hazards arising from the substance or mixture: Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for the firefighters

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information: Cool endangered receptacles with water fog or haze. Eliminate all ignition sources if safe to do so.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources.

6.2 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. Prevent from spreading (e.g. by damming-in or oil barriers).

6.3 Methods and material for containment and cleaning up: Absorb liquid components with liquid-binding material. Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

7 Handling and storage

7.1 Precautions for safe handling: Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles (60-80°F recommended).

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7.2 Conditions for safe storage, including any incompatibilities: Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame. Store separate from: Strong oxidizing agents, strong reducing agents, free radical generators and peroxides.

Further Information about storage conditions: Keep container tightly sealed. Store in an area with adequate ventilation.

8 Exposure controls/personal protection

8.1 Control parameters

Permissible Exposure Limits (PELs): NA
Threshold Limit Values (TLVs): N.A.

8.2 Engineering controls Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

8.3 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. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection: Not required under normal conditions of use. Avoid breathing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components.

Hand protection: Protective, impervious gloves. (Neoprene, Butyl-rubber, Nitrile rubber) The glove material has to be impermeable and resistant to the product / the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Face shield with safety glasses or goggles underneath. Contact lenses should not be worn.

Skin and Body protection: Protective work clothing. Where potential exposure warrants, rubber or plastic boots and chemically resistant protective suit.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance

| | |
|----------------------------------------------|-----------------------------------|
| Form: | Liquid |
| Colour: | Clear |
| Odour: | Sweet-Acrylic like |
| Odour threshold: | No data available |
| pH: | No data available |
| Melting point/range: | No data available |
| Boiling point/range: | No data available |
| Flash point: | >200 °F / >93 °C |
| Evaporation rate: | No data available |
| Flammability (solid, gaseous): | Not applicable |
| Upper/lower flammability or explosive limit: | Not applicable |
| Vapor pressure: | No data available |
| Vapor density: | No data available |
| Relative Density at 20°C: | 1.14g/cm ³ |
| Solubility in / Miscibility with | |
| Water: | Not miscible or difficult to mix. |
| Partition coefficient (n-octanol/water): | No data available |
| Auto/Self-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity | 700 - 1400 cps |

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10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions: Reacts with strong alkali. Exothermic polymerization. Reacts with strong acids and oxidizing agents. Reacts with catalysts.

10.4 Conditions to avoid: This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides and inhibitor depletion liberating heat.

10.5 Incompatible materials: Strong acids, bases and oxidizing agents.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide. Acrylates. Hazardous organic compounds.

11 Toxicological information

11.1 Information on likely routes of exposure:

Inhalation: May cause respiratory irritation

Ingestion: No data available

Skin contact: May cause skin damage. May cause an allergic skin reaction.

Eye contact: May cause serious eye damage.

11.2 Symptoms related to physical, chemical and toxicological characteristics: No available data

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure:

(Data for primary component, Reaction product: bisphenol - A - (epichlorhydrin) epoxy resin)

Acute toxic:

Oral LD50 > 2,000 mg/kg (rat)

Dermal LD50 > 2,000 mg/kg (rat)

Inhalation No data

Skin Corrosive/irritant:

Test material was slightly irritating to skin in key studies. For the skin, mean erythema and edema scores were 0.8 and 0.5 respectively.

Serious eye damage/eye irritation:

Test material was slightly irritating to the eye in key studies. The mean eye score was 0.4

Respiratory sensitization: No data available

Skin sensitization:

In a local lymph node assay, the concentration that would cause a 3-fold increase in proliferation (EC-3) was calculated to be 5.7% which is consistent with moderate dermal sensitization potential.

11.4 Numerical measures of toxicity: No data available for mixture.

Additional toxicological information: The product show the following dangers according to the calculation method of the General EU, Classification Guidelines for Preparations as issued in the latest version: Irritant, Danger through skin absorption. Toxic and /or corrosive effects may be delayed up to 24 hours. Inhalation of concentrated vapours as well as oral intake will lead to anesthesia-like conditions and headache, dizziness ,etc.

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No data for the complete mixture itself.

(Data for primary component, Reaction product: bisphenol - A - (epichlorhydrin) epoxy resin)

Fish 96hr-LC50 = 3.6mg/L test mat. *Oncorhynchus mykiss*
(direct application, nominal) (OECD Guideline 203)

LC50 1.41 mg/L 96hr *Oryzias latipes*

Crustacea 48hr-EC50 = 2.8mg/L test mat *Daphnia magna*
(direct application, nominal, based on: mobility) (OECD Guideline 202)

EC50 1.7mg/L 48hr

Aquatic Plant 72hr-EC50 > 11 mg/L *Scenedesmus capricornutum*
water soluble fraction (meas. (arithm. mean))
based on: growth rate (EPA-660/3-75-009)

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative Las Vegas (and vicinity), Nevada, United States of America potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

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12.5 Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available

13 Disposal considerations

13.1 Waste treatment methods

Waste from residue/unused product: This product should not be allowed to enter drains, water courses or the soil.

Dispose of this material in a safe manner and in accordance with federal, state and local regulations

Contaminated packaging: Disposal must be made in accordance with official federal, state and local regulations.

14 Transport information

DOT

UN number: Not Regulated

IATA

UN number: Not Regulated

IMDG

UN number: Not Regulated

TDG

UN number: Not Regulated

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United States (USA)

SARA

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

Component(s) above 'de minimus' level: None

TSCA (Toxic Substances Control Act):

All the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause birth defects or other reproductive harm: Toluene (108-88-3), residual only

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

15.2 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.

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Abbreviation 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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienist.

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substance

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

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

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

1.1 Product identifier

Trade name: **Armor-Hard Extreme Part B**

1.2 Application of the substance / the mixture: Epoxy binder

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

Metzger/McGuire Co.

P. O. Box 2217

Concord, NH 03302

Telephone: (800) 223-6680

1.4 Emergency telephone number:

ChemTel Inc.

(800) 255-3924, +1 (813) 248-0585

2 Hazards identification

2.1 GHS Classification of the substance or mixture

Acute Toxicity – Oral; Category 4

Acute Toxicity – Dermal; Category 4

Skin Corrosion; Category 1B

Serious Eye Damage; Category 1

Skin Sensitization; Category 1

Reproductive Toxicity; Category 2

Specific Target Organ Toxicity – single exposure; Category 3

2.2 GHS Label elements

Hazard pictograms/symbols



Signal word: Danger

Hazard statements:

H302+H312: Harmful if swallowed or in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H361: Suspected of damaging fertility or the unborn child.

Precautionary statements:

P201: Obtain special instructions before use.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P281: Use personal protective equipment as required

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTRE or doctor/physician.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Additional information: This product contains a component that is toxic by inhalation when aerosolized or sprayed. Please refer to Sections 11 for toxicity information. If product is not being aerosolized or sprayed, the inhalation toxicity may not be applicable.

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HMIS Rating:

Health: 3

Flammability: 1

Physical Hazard: 0

3 Composition/information on ingredients

3.2 Mixture

Description: Mixture of substances listed below with potential nonhazardous additions.

Dangerous components:

| | | |
|---------------|---------------------------------------|--------|
| CAS: 111-40-0 | Diethylenetriamine | 40-70% |
| CAS: 80-05-7 | Phenol, 4,4'-(1-methylethylidene)bis- | 30-50% |

4 First aid measures

4.1 Description of first aid measures

General information: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

After eye contact: Rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, consult a doctor.

After ingestion: Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed:

Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, kidney disorders, liver disorders, skin disorders and allergies.

4.3 Indication of any immediate medical attention and special treatment needed:

Contains Phenol, 4,4'-(1-methylethylidene)bis-. May cause an allergic reaction.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Foam, Fire-extinguishing powder, Carbon dioxide.

5.2 Specific hazards arising from the substance or mixture: May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

5.3 Advice for the firefighters

Protective equipment: Wear self-contained respiratory protective device, Wear fully protective suit.

Additional information: Cool endangered receptacles with water fog or haze. Eliminate all ignition sources if safe to do so.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources.

6.2 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. Prevent from spreading (e.g. by damming-in or oil barriers).

6.3 Methods and material for containment and cleaning up: Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

7 Handling and storage

7.1 Precautions for safe handling: Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles (60-80°F recommended).

7.2 Conditions for safe storage, including any incompatibilities: Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame.

Further Information about storage conditions: Keep container tightly sealed. Store in an area with adequate ventilation.

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8 Exposure controls/personal protection

8.1 Control parameters

Exposure Limits:

| | | | |
|--------------------|--------------------------------------------------------------------------|-------|---------|
| Diethylenetriamine | Time Weighted Average (TWA):ACGIH | 1 ppm | ----- |
| Diethylenetriamine | Recommended Exposure Limit (REL): NIOSH | 1 ppm | 4 mg/m3 |
| Diethylenetriamine | Time Weighted Average (TWA):OSHA Z1A | 1 ppm | 4 mg/m3 |
| Diethylenetriamine | Time Weighted Average (TWA): Permissible Exposure Limit (PEL): US CA OEL | 1 ppm | 4 mg/m3 |
| Diethylenetriamine | Time Weighted Average (TWA): TN OEL | 1 ppm | 4 mg/m3 |

8.2 Engineering controls Provide readily accessible eye wash stations and safety showers. Provide ventilation adequate to ensure concentrations are minimized.

8.3 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. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection may be advisable. Use respiratory protection when grinding or cutting material.

Hand protection: Protective, impervious gloves. (Neoprene, Butyl-rubber, Nitrile rubber) The glove material has to be impermeable and resistant to the product / the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Face shield with safety glasses or goggles underneath. Contact lenses should not be worn.

Skin and Body protection: Protective work clothing. Where potential exposure warrants, rubber or plastic boots and chemically resistant protective suit.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance

| | |
|-----------------------------------------------------|-----------------------------------|
| Form: | Liquid |
| Colour: | Straw |
| Odour: | Amine |
| Odour threshold: | No data available |
| pH: | Alkaline |
| Melting point/range: | No data available |
| Boiling point/range: | >392 °F / >200 °C |
| Flash point: | >212 °F / >100 °C |
| Evaporation rate: | No data available |
| Flammability (solid, gaseous): | Not applicable |
| Upper/lower flammability or explosive limit: | Not applicable |
| Vapor pressure: | No data available |
| Vapor density: | No data available |
| Relative Density at 20°C: | 1.03g/cm ³ |
| Solubility in / Miscibility with | |
| Water: | Not miscible or difficult to mix. |
| Partition coefficient (n-octanol/water): | No data available |
| Auto/Self-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity | 70-150 cps |

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

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10.3 Possibility of hazardous reactions: Reacts with strong alkali. Exothermic polymerization. Reacts with strong acids and oxidizing agents. Reacts with catalysts.

10.4 Conditions to avoid: Avoid contact with strong oxidizing agents, excessive heat or flames.

10.5 Incompatible materials: Strong acids, bases and oxidizing agents.

10.6 Hazardous decomposition products: Nitric acid, Ammonia, Nitrogen oxides (NOx), Nitrogen oxide can react with water vapors to form corrosive nitric acid, Carbon monoxide, Carbon dioxide (CO₂), Aldehydes, Flammable hydrocarbon fragments.

11 Toxicological information

11.1 Information on likely routes of exposure:

| | |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Skin contact: | Harmful in contact with skin. Causes skin burns. |
| Eye contact: | Causes eye burns. |
| Ingestion: | Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. |
| Inhalation: | This product contains a component that is toxic by inhalation when aerosolized or sprayed. If product is not being aerosolized or sprayed, the inhalation toxicity may not be applicable. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. |

11.2 Symptoms related to physical, chemical and toxicological characteristics: Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, kidney disorders, liver disorders, skin disorders and allergies.

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction. This product may cause adverse reproductive effects. Asthma, Eye disease, Kidney disorders, Liver disorders, Skin disorders and Allergies.

11.4 Numerical measures of toxicity: No data is available for full mixture.

| | | | |
|---------------------------------------|--------------|-------------|---------------------|
| Diethylenetriamine | CAS 111-40-0 | Oral LD50 | 1080 mg/kg (rat) |
| | | Dermal LD50 | 1090 mg/kg (rabbit) |
| Phenol, 4,4'-(1-methylethylidene)bis- | CAS 80-05-7 | Oral LD50 | 3250 mg/kg (rat) |
| | | Dermal LD50 | 3000 mg/kg (rabbit) |

12 Ecological information

12.1 Aquatic toxicity: No data available on the product itself.

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative potential: No data available on the product itself.

12.4 Mobility in soil: No data available.

12.5 Other adverse effects: No further relevant information available

13 Disposal considerations

13.1 Waste treatment methods

Waste from residue/unused product: This product should not be allowed to enter drains, water courses or the soil.

Dispose of this material in a safe manner and in accordance with federal, state and local regulations

Contaminated packaging: Disposal must be made in accordance with official federal, state and local regulations.

14 Transport information

DOT

| | |
|------------------------------|--------------------------------------------------------|
| UN number: | UN2735 |
| Proper Shipping Name: | Amines, Liquid, Corrosive, n.o.s. (Diethylenetriamine) |
| Hazard Class: | 8 |
| Packing Group: | II |
| Labels(s): | 8 |
| Marine Pollutant: | No |

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IATA

UN number: UN2735
Proper Shipping Name: Amines, Liquid, Corrosive, n.o.s. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: No

IMDG

UN number: UN2735
Proper Shipping Name: Amines, Liquid, Corrosive, n.o.s. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: No

TDG

UN number: UN2735
Proper Shipping Name: Amines, Liquid, Corrosive, n.o.s. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: No

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Toxic Substance Control Act (TSCA) 12(b) Component(s): None.

| Country | Regulatory list | Notification |
|-------------|-----------------|----------------------------------------------------------------------------------------------------------------|
| USA | TSCA | Included on Inventory. |
| EU | EINECS | Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer. |
| Canada | DSL | Included on Inventory. |
| Australia | AICS | Included on Inventory. |
| Japan | ENCS | Included on Inventory. |
| South Korea | ECL | Included on Inventory. |
| China | SEPA | Included on Inventory. |
| Philippines | PICCS | Included on Inventory. |

SARA

| |
|------------------------------------------------------------------------------|
| Section 355 (extremely hazardous substances): |
| None of the ingredients is listed. |
| Section 313 (Specific toxic chemical listings): |
| Component(s) above 'de minimus' level: Phenol, 4,4'-(1-methylethylidene)bis- |
| TSCA (Toxic Substances Control Act): |
| All the ingredients are listed. |

Proposition 65 (California):

| |
|--------------------------------------------------------------------------------------------------------|
| Chemicals known to cause cancer or reproductive toxicity: Phenol, 4,4'-(1-methylethylidene)bis- |
|--------------------------------------------------------------------------------------------------------|

15.2 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.

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Abbreviation 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
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienist.
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substance
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)