

Powers Fasteners, Inc.
Brewster, NY 10509

Date printed 18.12.2013, Revision 19.02.2013

Version 01

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SECTION 1: Identification of the substance / preparation and of the company

Product identifier **PE1000+, Comp. A**

Relevant identified uses of the substance or mixture and uses advised against Adhesive mortar for fastening elements A-Component (Resin)

Identified use none

Company Powers Fasteners, Inc.
2 Powers Lane
Brewster, NY 10509 / USA
Phone +1 800-524-3244
Fax +1 877-871-1965

Address enquiries to

Emergency phone Advisory body CHEMTREC: +1 703-527-3887 (24h) (Emergency Contact Information Only)
USA: 800-424-9300

SECTION 2: Hazards identification**Emergency Overview**

Appearance, Odor: pasty, light beige, characteristic

WARNING

CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

OSHA Regulatory Status This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

Potential health effects People who are allergic to epoxide should avoid the use of the product.

Potential environmental effects

SECTION 3: Composition / Information on ingredients

The product is a mixture.

Range [%]	Substance
25 - <50	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700) CAS: 25068-38-6
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700) CAS: 9003-36-5
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane CAS: 16096-31-4
1 - <10	Propylene carbonate CAS: 108-32-7

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For full text of H-statements and R-phrases: see SECTION 16.

SECTION 4: First aid measures

Description of first aid measures Change soaked clothing immediately.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Supply with medical care.
Rinse out mouth and give plenty of water to drink.

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

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SECTION 5: Fire-fighting measures

Suitable extinguishing media	foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not be used	Full water jet
Special exposure hazards arising from the substance or preparation itself or combustion products	Unknown risk of formation of toxic pyrolysis products. Carbon monoxide (CO) Chlorine compounds.
Special protective equipment for firefighters	Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus.
Additional information	Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations. Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Use personal protective equipment. High risk of slipping due to leakage/spillage of product.
Environmental precautions	Do not discharge into the drains/surface waters/groundwater. In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.
Methods and material for containment and cleaning up	Take up mechanically. Take up residues with absorbent material (e.g. sand, sawdust, generalpurpose binder, diatomaceous earth). Dispose of absorbed material in accordance within the regulations.

SECTION 7: Handling and storage

Precautions for safe handling	Use only in well-ventilated areas.
Advice on protection against fire and explosion	Keep away from all sources of ignition - Refrain from smoking. Take precautionary measures against static discharges.
Requirements for storage rooms and vessels	Keep only in original container. Prevent penetration into the ground.
Advice on storage compatibility	Do not store together with food and animal food/diet.
Further information on storage conditions	Keep container in a well-ventilated place. Keep container tightly closed. Keep in a cool place. Store in a dry place. Protect from atmospheric moisture and water. Recommended storage temperature: 5 - 25 °C

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SECTION 8: Exposure controls / personal protection**Additional advice on system design**

Ensure adequate ventilation on workstation.

Ingredients with occupational exposure limits to be monitored (US)

Range [%]	Substance
1 - <20	Propylene carbonate
	CAS: 108-32-7, EINECS/ELINCS: 203-572-1, EU-INDEX: 607-194-00-1
	Long-term exposure: OSHA PEL

Respiratory protection

If ventilation insufficient, wear respiratory protection.
Short term: filter apparatus, combination filter A-P2.

Hand protection

The details concerned are recommendations. Please contact the glove supplier for further information.
Nitrile rubber, >480 min (EN 374).

Eye protection

Tightly fitting goggles.

Skin protection

Protective clothing.

General protective measures

Avoid contact with eyes and skin.
Do not inhale gases/vapours/aerosols.
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.

Hygiene measures

Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.
Do not eat, drink or smoke when using this product.

Delimitation and monitoring of the environmental exposition

See SECTION 6+7.

SECTION 9: Physical and chemical properties

Form	pasty
Color	light beige
Odor	characteristic
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not determined
Flash point [°C]	not applicable
Flammability [°C]	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidizing properties	not determined
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	1,55 (23°C / 73,4°F)
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not determined
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined

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SECTION 10: Stability and reactivity

Reactivity	No dangerous reactions known if used as directed.
Chemical stability	Stable under normal ambient conditions (ambient temperature).
Possibility of hazardous reactions	Reactions with oxidizing agents. Reactions with alkalies, amines and strong acids. Reactions with alcohols.
Conditions to avoid	See SECTION 7.2.
Incompatible materials	See SECTION 10.3.
Hazardous decomposition products	No hazardous decomposition products known.

SECTION 11: Toxicological information**Information on toxicological effects****Acute toxicity**

Product
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, Rat: > 2000 mg/kg.

Range [%]	Substance
25 - <50	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6 LD50, oral, Rat: 11400 mg/kg bw (GESTIS). LD50, dermal, Rabbit: 22800 mg/kg bw (GESTIS).
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 9003-36-5 LD50, dermal, Rabbit: 400 mg/kg bw (GESTIS). LD50, oral, Rat: 2000 mg/kg bw (GESTIS).
1 - <10	Propylene carbonate, CAS: 108-32-7 LD50, dermal, Rabbit: > 20000 mg/kg (IUCLID). LD50, oral, Rat: 33300 mg/kg (IUCLID).

Serious eye damage/irritation	Irritant
Skin corrosion/irritation	Irritant
Respiratory or skin sensitisation	Sensitizing.
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	Toxicological data of complete product are not available. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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SECTION 12: Ecological information**Toxicity**

Range [%]	Substance
25 - <50	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700), CAS: 25068-38-6
	LC50, (96h), Pimephales promelas: 3,1 mg/l (Lit.).
	EC50, (48h), Daphnia magna: 1,4-1,7 mg/l (Lit.).
	IC50, Bacteria: > 42,6 mg/l/18h (Lit.).
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane, CAS: 16096-31-4
	EC50, (24h), Daphnia magna: 47 mg/l.
	LC50, (96h), Brachidanio rerio: 17,1 - 30,9 mg/l.
1 - <10	Propylene carbonate, CAS: 108-32-7
	EC50, (48h), Daphnia magna: > 1000 mg/l (IUCLID).
	EC50, (96h), Cyprinus carpio: > 1000 mg/l (IUCLID).

Behaviour in environment compartments

not determined

Behaviour in sewage plant

not determined

Biological degradability

not determined

COD

not determined

BOD 5

not determined

Other adverse effects

The product was classified on the basis of the calculation procedure of the preparation directive.

Ecological data of complete product are not available.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

Do not discharge product unmonitored into the environment.

The product contains organically bound halogen in accordance with the formulation.

SECTION 13: Disposal considerations**Product**

Coordinate disposal with the disposal contractor/authorities if necessary.

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Dispose full / partially emptied cartridges as hazardous waste in accordance with official regulations.

RCRA Hazard Class (40CFR 261)

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

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SECTION 14: Transport information**Transport by land according to ADR/RID**

- Classification Code

UN 3077 Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin) 9 III
M7

- Label



- ADR LQ

5 kg

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (E)

Inland navigation (ADN)

- Classification Code

UN 3077 Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin) 9 III
M7

- Label

**Marine transport in accordance with IMDG**

- EMS

UN 3077 Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin) 9 III
MARINE POLLUTANT
F-A, S-F

- Label



- IMDG LQ

5 kg

Air transport in accordance with IATA

- Label

UN 3077 Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin) 9 III

**DOT Road Shipment Information (49 CFR)**

- Label

UN/NA 3077 Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin)
9 III

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SECTION 15: Regulatory information**US Regulations****National regulations**

29 CFR 1910.1200, ANSI Z400.1-2010, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65

- SARA, 302

not determined

- SARA, 311

This product is classified as hazardous under SARA 311.

- SARA, 313

not determined

- CA Proposition 65

This product contains a substance known to the State of California to cause cancer. Silica, Quartz - CAS# 14808-60-7.

- TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

- FDA

not applicable

**American Conference of Governmental
Industrial Hygienists - ACGIH**

ACGIH: yes - contains crystalline silica

**International Agency for Research on
Cancer IARC**

IARC: yes - contains crystalline silica.

**National Toxicology Program - NTP
HAP-VOC**

This product is named NTP - National Toxicology Program (contains crystalline silica).
not applicable

Transport-regulations

DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).

Other Right to Know Laws**EC Regulations**

1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach);
1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC

Hazard pictograms**Signal word**

WARNING

Contains:

Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) EINECS: 500-033-5

Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) EINECS: 500-006-8

1,6-Bis(2,3-epoxypropoxy)hexane EINECS: 240-260-4

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P280 Wear eye protection/face protection.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

Labelling

The product is classified and required to be labelled in accordance with EC-Directives

Hazard symbols

Irritant



Dangerous for the environment

R-phrases

R 36/38: Irritating to eyes and skin.

R 43: May cause sensitisation by skin contact.

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

S-phrases

S 2: Keep out of the reach of children.

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

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

S 51: Use only in well-ventilated areas.

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Special labelling

S 61: Avoid release to the environment. Refer to special instructions, safety data sheets.
 S 46: If swallowed, seek medical advice immediately and show this container or label.

Contains epoxy-containing compounds. Observe manufacturer's instructions.

WARNING

Emergency Overview

CAUSES EYE AND SKIN IRRITATION.
 MAY CAUSE ALLERGIC SKIN REACTION.
 HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
 MAY CAUSE RESPIRATORY TRACT IRRITATION.

SECTION 16: Other information

Observe employment restrictions for people yes

HMIS Ratings

HEALTH	2	2 - Moderate Hazard
FLAMMABILITY	1	1 - Slight Hazard
REACTIVITY	1	1 - Slight Hazard
PERSONAL PROTECTION	X	X - Personal protection rating to be supplied by user depending on use conditions

NFPA Ratings

1
2 1
-

TOP, FLAMMABILITY: 1 - Slight Hazard
 LEFT, HEALTH: 2 - Moderate Hazard RIGHT, REACTIVITY: 1 - Slight Hazard
 BOTTOM, SPECIAL NOTICE: -

Modified position

none

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SECTION 1: Identification of the substance / preparation and of the company**Product identifier****PE1000+, Comp. B****Relevant identified uses of the substance or mixture and uses advised against**

Adhesive mortar for fastening elements" B-Component (Hardener)

Identified use

none

Company

Powers Fasteners, Inc.
2 Powers Lane
Brewster, NY 10509 / USA
Phone +1 800-524-3244
Fax +1 877-871-1965

Address enquiries to**Emergency phone Advisory body**

CHEMTREC: +1 703-527-3887 (24h) (Emergency Contact Information Only)
USA: 800-424-9300

SECTION 2: Hazards identification**Emergency Overview****Appearance, Odor:**

pasty, red, amine-like

DANGER

CAUSES (SEVERE) EYE BURNS.

CAUSES (SEVERE) SKIN BURNS.

MAY CAUSE ALLERGIC SKIN REACTION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

HARMFUL IF ABSORBED THROUGH SKIN.

HARMFUL IF SWALLOWED.

HARMFUL IF INHALED.

HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

OSHA Regulatory Status

This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

Potential health effects

People who are allergic to amines should avoid the use of the product.

Potential environmental effects**SECTION 3: Composition / Information on ingredients**

The product is a mixture.

Range [%]	Substance
10 - <40	3-Aminomethyl-3,5,5-trimethylcyclohexylamine
	CAS: 2855-13-2
10 - <40	Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)
	CAS: 57214-10-5
10 - <25	Formaldehyde, oligomeric reaction products with 4,4'-isopropylidenediphenol and diethylenetriamine
	CAS: 77138-45-5
1 - <10	Benzyl alcohol
	CAS: 100-51-6
1 - <10	m-Phenylenebis(methylamine)
	CAS: 1477-55-0
1 - <5	2,2'-Iminodiethylamine
	CAS: 111-40-0
1 - <3	Phenol
	CAS: 108-95-2

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For full text of H-statements and R-phrases: see SECTION 16.

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SECTION 4: First aid measures

Description of first aid measures	Remove contaminated soaked clothing immediately and dispose of safely.
Inhalation	Remove the victim into fresh air and keep him calm. Seek medical advice immediately.
Skin contact	In case of contact with skin wash off immediately with soap and water. Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.
Ingestion	Do not induce vomiting. Seek medical advice immediately. Rinse out mouth and give plenty of water to drink.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media	foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not be used	Full water jet
Special exposure hazards arising from the substance or preparation itself or combustion products	Unknown risk of formation of toxic pyrolysis products. Carbon monoxide (CO) Nitrogen oxides (NOx).
Special protective equipment for firefighters	Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus. Wear full protective suit.
Additional information	Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations. Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Use personal protective equipment. High risk of slipping due to leakage/spillage of product.
Environmental precautions	Do not discharge into the drains/surface waters/groundwater. In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.
Methods and material for containment and cleaning up	Take up mechanically. Take up residues with absorbent material (e.g. sand, sawdust, generalpurpose binder, diatomaceous earth). Dispose of absorbed material in accordance within the regulations.

SECTION 7: Handling and storage

Precautions for safe handling	Use only in well-ventilated areas.
Requirements for storage rooms and vessels	Keep only in original container. Prevent penetration into the ground.
Advice on storage compatibility	Do not store together with food and animal food/diet.
Further information on storage conditions	Keep container in a well-ventilated place. Keep container tightly closed. Keep in a cool place. Store in a dry place. Protect from atmospheric moisture and water. Recommended storage temperature: 5 - 25 °C

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SECTION 8: Exposure controls / personal protection**Additional advice on system design**

Ensure adequate ventilation on workstation.

Ingredients with occupational exposure limits to be monitored (US)

Range [%]	Substance
1 - <3	Phenol
	CAS: 108-95-2, EINECS/ELINCS: 203-632-7, EU-INDEX: 604-001-00-2
	Long-term exposure: 5 ppm, 19,2 mg/m ³ , ACGIH 2011, A4, IBE

Respiratory protection

If ventilation insufficient, wear respiratory protection.
Short term: filter apparatus, combination filter A-P2.

Hand protection

The details concerned are recommendations. Please contact the glove supplier for further information.
Nitrile rubber, >480 min (EN 374).

Eye protection

Tightly fitting goggles.

Skin protection

Protective clothing.

General protective measures

Avoid contact with eyes and skin.
Do not inhale gases/vapours/aerosols.
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.

Hygiene measures

Remove contaminated soaked clothing immediately and dispose of safely.
Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.
Use barrier skin cream.
Showers and eye wash stations should be provided.

Delimitation and monitoring of the environmental exposition

See SECTION 6+7.

SECTION 9: Physical and chemical properties

Form	pasty
Color	red
Odor	amine-like
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not determined
Flash point [°C]	not applicable
Flammability [°C]	not determined
Lower explosion limit	1,0 Vol.-%
Upper explosion limit	13 Vol.-%
Oxidizing properties	not determined
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	partially miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	not determined
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined

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SECTION 10: Stability and reactivity

Reactivity	No dangerous reactions known if used as directed.
Chemical stability	Stable under normal ambient conditions (ambient temperature).
Possibility of hazardous reactions	Reactions with oxidizing agents. Reactions with strong acids.
Conditions to avoid	See SECTION 7.2.
Incompatible materials	See SECTION 10.3.
Hazardous decomposition products	No hazardous decomposition products known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Range [%]	Substance
10 - <40	3-Aminomethyl-3,5,5-trimethylcyclohexylamine, CAS: 2855-13-2 LD50, oral, Rat: 1030 mg/kg bw (IUCLID).
1 - <10	Benzyl alcohol, CAS: 100-51-6 LC50, inhalative, Rat: 8,8 mg/l (4h) (IUCLID). LD50, dermal, Rabbit: 2000 mg/kg bw (RTECS). LD50, oral, Rat: 1230 mg/kg bw (IUCLID). LC50, inhalative, Rat: 4,178 mg/l/4h (OECD TG 403).
1 - <5	2,2'-Iminodiethylamine, CAS: 111-40-0 LD50, dermal, Rabbit: 950 - 1240 mg/kg bw (IUCLID). LC50, inhalative, Rat: 1,8 mg/L (IUCLID). LD50, oral, Rat: 819 - 1430 mg/kg bw (IUCLID).
1 - <10	m-Phenylenebis(methylamine), CAS: 1477-55-0 LC50, inhalative, Rat: 2,4-mg/l/4h (Lit.). LD50, oral, Rat: 930 mg/kg (IUCLID). LD50, dermal, Rabbit: ~ 2000 mg/kg (IUCLID). LC50, inhalative, Rat: ~ 700 ppm 1h (IUCLID).
1 - <3	Phenol, CAS: 108-95-2 LD50, oral, Rat: 317 mg/kg (Lit.). LD50, dermal, Rat: 525-714 mg/kg (Lit.). LC50, inhalative, Rat: 316 mg/l (4h) (Lit.).

Serious eye damage/irritation	Product is caustic.
Skin corrosion/irritation	Product is caustic.
Respiratory or skin sensitisation	Sensitizing.
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	The product was classified on the basis of the calculation procedure of the preparation directive. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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SECTION 12: Ecological information

Toxicity

Range [%]	Substance
10 - <40	3-Aminomethyl-3,5,5-trimethylcyclohexylamine, CAS: 2855-13-2
	LC50, (96h), Leuciscus idus: 110 mg/L (IUCLID).
	EC50, (24h), Leuciscus idus: 42 mg/L (IUCLID).
	EC50, (72h), Scenedesmus subspicatus: 37 mg/L (IUCLID).
1 - <10	Benzyl alcohol, CAS: 100-51-6
	EC50, Bacteria: 71,4 mg/l (0,5 h) (IUCLID).
	EC50, (24h), Daphnia magna: 400 mg/l (IUCLID).
	LC50, (96h), Lepomis macrochirus: 10 mg/l (IUCLID).
1 - <5	2,2'-Iminodiethylamine, CAS: 111-40-0
	LC50, (96h), Leuciscus idus: 430 mg/L (IUCLID).
	EC50, (96h), Scenedesmus subspicatus: 592 mg/L (IUCLID).
	EC50, (48h), Daphnia magna: 17 mg/L (IUCLID).
1 - <10	m-Phenylenebis(methylamine), CAS: 1477-55-0
	LC50, fish: 130 mg/l (Lit.).
	EC10, Bacteria: 90 mg/l (Lit.).
1 - <3	Phenol, CAS: 108-95-2
	EC50, (48h), Daphnia magna: 4,2 mg/l (Lit.).
	IC50, (96h), Algae: 150 mg/l (Lit.).
	LC50, (96h), Oncorhynchus mykiss: 5 mg/l (Lit.).

Behaviour in environment compartments

not determined

Behaviour in sewage plant

not determined

Biological degradability

not determined

COD

not determined

BOD 5

not determined

Other adverse effects

The product was classified on the basis of the calculation procedure of the preparation directive.
Ecological data of complete product are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

Product

Coordinate disposal with the disposal contractor/authorities if necessary.

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Dispose full / partially emptied cartridges as hazardous waste in accordance with official regulations.

RCRA Hazard Class (40CFR 261)

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

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SECTION 14: Transport information**Transport by land according to ADR/RID**

UN 3259 Amines, solid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine)) 8 III

- Classification Code

C8

- Label



- ADR LQ

5 kg

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (E)

Inland navigation (ADN)

UN 3259 Amines, solid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine)) 8 III

- Classification Code

C8

- Label

**Marine transport in accordance with IMDG**

UN 3259 Amines, solid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine)) 8 III

- EMS

F-A, S-B

- Label



- IMDG LQ

5 kg

Air transport in accordance with IATA

UN 3259 Amines, solid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine)) III

- Label

**DOT Road Shipment Information (49 CFR)**

UN/NA 3259 Amines, solid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine)) 8 III

- Label



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SECTION 15: Regulatory information**US Regulations****National regulations**

29 CFR 1910.1200, ANSI Z400.1-2010, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65

- SARA, 302

This product is classified as hazardous under SARA 302.

- SARA, 311

This product is classified as hazardous under SARA 311.

- SARA, 313

One or some ingredient(s) are listed under this regulation.

- CA Proposition 65

This product contains a substance known to the State of California to cause cancer. Silica, Quartz - CAS# 14808-60-7.

- TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

- FDA

not applicable

**American Conference of Governmental
Industrial Hygienists - ACGIH**

ACGIH: yes - contains crystalline silica

**International Agency for Research on
Cancer IARC**

not determined

National Toxicology Program - NTP

This product is named NTP - National Toxicology Program (contains crystalline silica).
This product is named NTP - National Toxicology Program (contains Benzyl alcohol).
This product is named NTP - National Toxicology Program (contains Phenol).

HAP-VOC

not applicable

Transport-regulations

DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).

Other Right to Know Laws**EC Regulations**

1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach);
1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC

Hazard pictograms**Signal word**

DANGER

Contains:

Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)
EINECS: 500-137-0

3-Aminomethyl-3,5,5-trimethylcyclohexylamine EINECS: 220-666-8

Formaldehyde, oligomeric reaction products with 4,4'-isopropylidenediphenol and
diethylenetriamine EINECS: 500-263-6

m-Phenylenebis(methylamine) EINECS: 216-032-5

2,2'-Iminodiethylamine EINECS: 203-865-4

Phenol EINECS: 203-632-7

Hazard statements

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

H341 Suspected of causing genetic defects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P201 Obtain special instructions before use.

P260 Do not breathe vapours.

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.

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

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.

~45 % of the mixture consists of ingredient(s) of unknown toxicity.

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Labelling**Hazard symbols**

Contains ~45 % of components with unknown hazards to the aquatic environment.
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

The product is classified and required to be labelled in accordance with EC-Directives



Corrosive

R-phrases

R 20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R 34: Causes burns.

R 43: May cause sensitisation by skin contact.

R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 68: Possible risk of irreversible effects.

S-phrases

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

S 23.3: Do not breathe vapour.

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

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

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

S 51: Use only in well-ventilated areas.

S 61: Avoid release to the environment. Refer to special instructions, safety data sheets.

Special labelling

not applicable

DANGER

Emergency Overview

CAUSES (SEVERE) EYE BURNS.

CAUSES (SEVERE) SKIN BURNS.

MAY CAUSE ALLERGIC SKIN REACTION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

HARMFUL IF ABSORBED THROUGH SKIN.

HARMFUL IF SWALLOWED.

HARMFUL IF INHALED.

HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

SECTION 16: Other information

Observe employment restrictions for people

yes

HMIS Ratings

HEALTH	2	2 - Moderate Hazard
FLAMMABILITY	1	1 - Slight Hazard
REACTIVITY	1	1 - Slight Hazard
PERSONAL PROTECTION	X	X - Personal protection rating to be supplied by user depending on use conditions

NFPA Ratings

1
2 1
-

TOP, FLAMMABILITY: 1 - Slight Hazard

LEFT, HEALTH: 2 - Moderate Hazard RIGHT, REACTIVITY: 1 - Slight Hazard

BOTTOM, SPECIAL NOTICE: -

Modified position

none