

#### **Powers Fasteners, Inc.** Brewster, NY 10509 Date printed 03.09.2015, Revision 03.09.2015 Version 02. Supersedes version: 01 Page 1 / 12 SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1 PE1000+, Comp. A 1.2 Relevant identified uses of the substance or mixture and uses advised against 1.2.1 Relevant uses Adhesive mortar for fastening to concrete elements A-Component (Resin) 1.2.2 Uses advised against None known. 1.3 Details of the supplier of the safety data sheet Company Powers Fasteners, Inc. 2 Powers Lane Brewster, NY 10509 / USA Phone +1 800-524-3244 Fax +1 877-871-1965 Address enquiries to Safety Data Sheet sdb@chemiebuero.de 1.4 Emergency telephone number Chemtrec: 1-800-424-9300 (Within Continental USA); Advisory body Chemtrec: 703-527-3887 (Outside USA). **SECTION 2: Hazards identification** 2.1 Classification of the substance or mixture Skin Irrit. 2: H315 Causes skin irritation. Eye Irrit. 2: H319 Causes serious eye irritation. Skin Sens. 1: H317 May cause an allergic skin reaction. Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. Label elements 22 The product is required to be labelled in accordance with GHS-Directives. Hazard pictograms Signal word WARNING Contains: Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight $\leq$ 700) Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight $\leq$ 700) 1,6-Bis(2,3-epoxypropoxy)hexane 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** P273 Avoid release to the environment. P280 Wear protective gloves/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water/soap. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

regulation.

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



Brewster,	NY 10509
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Date printed 03.09.2015, Revision 03.09.2015		Version 02. Supersedes version: 01	Page 2 / 12
2.3	Other hazards		
	Human health dangers	People who are allergic to epoxide should avoid the use of the product.	
	Environmental hazards	Does not contain any PBT or vPvB substances.	
	Other hazards	Further hazards were not determined with the current level of knowledge.	

## SECTION 3: Composition / Information on ingredients

## Product-type:

#### The product is a mixture.

Range [%]	Substance
0.1	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700)
	CAS: 25068-38-6
	GHS: Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Skin Sens. 1: H317 - Aquatic Chronic 2: H411
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700)
	CAS: 9003-36-5
	GHS: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Aquatic Chronic 2: H411
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane
	CAS: 16096-31-4
	GHS: Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Skin Sens. 1: H317 - Aquatic Chronic 3: H412
1 - <10	Alkyl Ester (Ref.:722 43/00/2012.0028, Germany)
	GHS: Eye Irrit. 2: H319
1 - <5	Quartz (< 10µm)
	CAS: 14808-60-7
	GHS: STOT RE 1: H372
Comment on com	ponent parts The guartz in this preparation is not available on foreseeable use.

Comment on component parts The qua Substan

The quartz in this preparation is not available on foreseeable use. Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%. For full text of H-statements: see SECTION 16.

#### **SECTION 4: First aid measures**

4.1	Description of first aid measures General information	Take off contaminated clothing and wash before reuse.
	Inhalation	Ensure supply of fresh air. In the event of symptoms seek 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.

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

Irritant effects

Allergic reactions

## 4.3 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



## **Powers Fasteners, Inc.** Brewster, NY 10509 Date printed 03.09.2015, Revision 03.09.2015 Version 02. Supersedes version: 01 Page 3 / 12 5.2 Special hazards arising from the substance or mixture In the event of fire the following can be released: Carbon monoxide (CO) Chlorine compounds. Advice for firefighters 5.3 Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus. 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** 6.1 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 6.2 Do not discharge into the drains/surface waters/groundwater. In case the product spills into drains/surface waters/groundwater, immediately inform the authorities. 6.3 Methods and material for containment and cleaning up Take up mechanically. Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth). Dispose of absorbed material in accordance within the regulations. Reference to other sections 6.4 See SECTION 8+13 **SECTION 7: Handling and storage** 7.1 Precautions for safe handling Use only in well-ventilated areas. 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. Conditions for safe storage, including any incompatibilities 7.2 Keep only in original container. Prevent penetration into the ground. Do not store together with food and animal food/diet. 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 / 41 - 77 F Specific end use(s) 7.3



## Brewster, NY 10509

Date printed 03.09.2015, Revision 03.09.2015

Version 02. Supersedes version: 01 Page 4 / 12

## SECTION 8: Exposure controls/personal protection

Ingredients with occupational exposure limits to be monitored (US)

#### 8.1 Control parameters

not applicable

## DNEL

Range [%]	Substance
25 - <50	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068- 38-6
	Industrial, inhalative, Acute - systemic effects: 12,25 mg/m <sup>3</sup> .
	Industrial, inhalative, Long-term - systemic effects: 12,25 mg/m <sup>3</sup> .
	Industrial, dermal, Long-term - systemic effects: 8,33 mg/kg bw/d.
	Industrial, dermal, Acute - systemic effects: 8,33 mg/kg bw/d.
	general population, dermal, Acute - systemic effects: 3,571 mg/kg bw/d.
	general population, dermal, Long-term - systemic effects: 3,571 mg/kg bw/d.
	general population, oral, Long-term - systemic effects: 0,75 mg/kg bw/d.
	general population, oral, Acute - systemic effects: 0,75 mg/kg bw/d.
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 9003- 36-5
	Industrial, dermal, Acute - local effects: 0,0083 mg/cm <sup>2</sup> .
	Industrial, dermal, Long-term - systemic effects: 104,15 mg/kg bw/d.
	Industrial, inhalative, Long-term - systemic effects: 29,39 mg/m <sup>3</sup> .
	general population, inhalative, Long-term - systemic effects: 8,7 mg/m <sup>3</sup> .
	general population, dermal, Long-term - systemic effects: 62,5 mg/kg bw/d.
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane, CAS: 16096-31-4
	worker, dermal, Long-term - local effects: 22,6 µg/cm <sup>2</sup> .
	worker, dermal, Long-term - systemic effects: 2,8 mg/kg bw/d.
	worker, inhalative, Long-term - local effects: 0,44 mg/m <sup>3</sup> .
	worker, inhalative, Long-term - systemic effects: 4,9 mg/m <sup>3</sup> .
	general population, inhalative, Long-term - local effects: 0,27 mg/m <sup>3</sup> .
	general population, dermal, Acute - systemic effects: 1,7 mg/kg bw/d.
	general population, inhalative, Acute - systemic effects: 2,9 mg/m <sup>3</sup> .
	general population, oral, Acute - systemic effects: 0,83 mg/kg bw/d.
	general population, dermal, Acute - local effects: 13,6 µg/cm <sup>2</sup> .
	general population, dermal, Long-term - systemic effects: 1,7 mg/kg bw/d.
	general population, inhalative, Long-term - systemic effects: 2,9 mg/m <sup>3</sup> .
	general population, oral, Long-term - systemic effects: 0,83 mg/kg bw/d.
	general population, dermal, Long-term - local effects: 13,6 µg/cm <sup>2</sup> .



Date printed 03.09.2015, Revision 03.09.2015

Version 02. Supersedes version: 01

Page 5 / 12

#### PNEC

Range [%]	Substance
	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068- 38-6
	seawater, 0,0006 mg/l.
	sewage treatment plants (STP), 10 mg/l.
	sediment (freshwater), 0,996 mg/l.
	sediment (seaater), 0,0996 mg/l.
	soil, 0,196 mg/l.
	freshwater, 0,006 mg/l.
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 9003- 36-5
	sewage treatment plants (STP), 10 mg/l.
	seawater, 0,0003 mg/l.
	sediment (freshwater), 0,294 mg/kg dw.
	sediment (seaater), 0,0294 mg/kg dw.
	soil, 0,237 mg/kg dw.
	freshwater, 0,003 mg/l.
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane, CAS: 16096-31-4
	sediment (freshwater), 0,283 mg/kg dw.
	freshwater, 0,0115 mg/l.
	seawater, 1,15 µg/l.
	sediment (seaater), 0,283 mg/kg dw.

#### 8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	safety glasses
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm Nitrile rubber, >480 min (EN 374).
Skin protection	Protective clothing.
	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 handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	If ventilation is insufficient, wear respiratory protection. Short term: filter apparatus, combination filter A-P2.
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.



Date printed 03.09.2015, Revision 03.09.2015

Version 02. Supersedes version: 01

Page 6 / 12

SEC	SECTION 9: Physical and chemical properties		
9.1	Information on basic physical and chemical properties		
	Form	pasty	
	Color	light beige	
	Odor	characteristic	
	Odour threshold	not determined	
	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	
9.2	Other information	No information available.	
SEC	SECTION 10: Stability and reactivity		

#### 10.1 Reactivity

No dangerous reactions known if used as directed.

#### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

#### 10.3 Possibility of hazardous reactions

Reactions with oxidizing agents. Reactions with alkalies, amines and strong acids. Reactions with alcohols.

#### 10.4 Conditions to avoid

See SECTION 7.2.

#### 10.5 Incompatible materials

See SECTION 10.3.

#### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



## Brewster, NY 10509

Date printed 03.09.2015, Revision 03.09.2015

Version 02. Supersedes version: 01 Page 7 / 12

## **SECTION 11: Toxicological information**

#### 11.1 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, dermal, Rabbit: 23000 mg/kg.
	LD50, oral, Rat: > 15000 mg/kg.
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 9003- 36-5
	LD50, dermal, Rat: > 2000 mg/kg.
	LD50, oral, Rat: > 2000 mg/kg.
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane, CAS: 16096-31-4
	LD50, dermal, Rat: > 2000 mg/kg bw.
	LD50, oral, Rat: 2900 mg/kg bw.
1 - <10	Alkyl Ester (Ref.:722 43/00/2012.0028, Germany)
	LD50, dermal, Rabbit: > 2000 mg/kg.
	LD50, oral, Rat: 5000 mg/kg.

Serious eye damage/irritation	Toxicological data of complete product are not available. Irritant Calculation method
Skin corrosion/irritation	Toxicological data of complete product are not available. Irritant Calculation method
Respiratory or skin sensitisation	Toxicological data of complete product are not available. May cause an allergic skin reaction. Calculation method
Specific target organ toxicity — single exposure	Does not contain any relevant substances fulfilling the classification criteria.
Specific target organ toxicity — repeated exposure	Based on the information available, the classification criteria have not been fulfilled.
Mutagenicity	Does not contain any relevant substances fulfilling the classification criteria.
Reproduction toxicity	Does not contain any relevant substances fulfilling the classification criteria.
Carcinogenicity	Does not contain any relevant substances fulfilling the classification criteria.
Aspiration hazard	Does not contain any relevant substances fulfilling the classification criteria.
General remarks	
	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.



#### Brewster, NY 10509

Date printed 03.09.2015, Revision 03.09.2015

Version 02. Supersedes version: 01 Page

Page 8 / 12

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Range [%]	Substance
25 - <50	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068- 38-6
	LC50, (96h), Oncorhynchus mykiss: 2 mg/l.
EC50, (48h), Daphnia magna: 1,8 mg/l.	
	IC50, Bacteria: > 42,6 mg/l (18 h).
	ErC50, (72h), Selenastrum capricornutum: 11 mg/l.
10 - <20	Reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 9003- 36-5
	LC50, (72h), Algae: > 1000 mg/l.
	LC50, (96h), fish: 2,54 mg/l.
	EC50, (48h), Daphnia magna: 2,55 mg/l.
	BCF, 150.
10 - <20	1,6-Bis(2,3-epoxypropoxy)hexane, CAS: 16096-31-4
	LC50, (96h), Oncorhynchus mykiss: 30 mg/l.
	EC50, (48h), Daphnia magna: 47 mg/l.
	EC50, (24h), Daphnia magna: 67 mg/l.
	BCF, 3,57.

#### 12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

#### 12.3 Bioaccumulative potential

No information available.

#### 12.4 Mobility in soil

No information available.

## 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

#### 12.6 Other adverse effects

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.



## Brewster, NY 10509

Date printed 03.09.2015, Revision 03.09.201	5 Version 02. Supersedes version: 01 Page 9 / 12	
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.	
•		
SECTION 14: Transport 14.1 UN number See SECTION 14.2 in accordance with		
<b>14.1 UN number</b> See SECTION 14.2 in accordance with		
14.1 UN number		

Transport category (tunnel restriction code) 3 (E)

- Label

- ADR LQ

- ADR 1.1.3.6 (8.6)

Inland navigation (ADN)

- Classification Code

- Label



5 kg

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



Marine transport in accordance with IMDG - EMS - Label

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



Air transport in accordance with IATA UN 3077 Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin) 9 III

- Label

- IMDG LQ



DOT Road Shipment Information (49 CFR)

- Label

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

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

#### 14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name



## Brewster, NY 10509

Date printed 03.09.2015, Revision 03.09.2015

Version 02. Supersedes version: 01 Page 10 / 12

#### 14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information	

#### **US Regulations**

National regulations	29 CFR 1910.1200, HCS-2012, 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	This product is named NTP - National Toxicology Program (contains crystalline silica).
HAP-VOC	not applicable
Transport-regulations	DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).
Other Right to Know Laws	

#### **SECTION 16: Other information**

#### 16.1 Hazard statements (SECTION 3)

H372 Causes damage to organs through prolonged or repeated exposure.

- H412 Harmful to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H315 Causes skin irritation.

#### 16.2 Ratings

#### 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



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



Date printed 03.09.2015, Revision 03.09.2015	Version 02. Supersedes version: 01 Page 11 / 1
6.3 Abbreviations and acronyms:	
	ACGIH = American Conference of Governmental Industrial Hygienists;
	ADR = Accord européen relatif au transport international des marchandises Dangereuses pa
	Route;
	RID = Règlement concernant le transport international ferroviaire de marchandises
	dangereuses;
	ADN = Accord européen relatif au transport international des marchandises dangereuses par
	voie de navigation intérieure;
	CAS = Chemical Abstracts Service;
	CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
	CFR = Code of Federal Regulations;
	CPR = Controlled Products Regulations;
	DMEL = Derived Minimum Effect Level;
	DNEL = Derived No Effect Level;
	DOT = Department of Transportation;
	EC50 = Median effective concentration;
	EPA = Environmental Protection Agency;
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals;
	IATA = International Air Transport Association;
	IBC-Code = International Code for the Construction and Equipment of Ships carrying
	Dangerous Chemicals in Bulk;
	IC50 = Inhibition concentration, 50%;
	IMDG = International Maritime Code for Dangerous Goods;
	IARC = International Agency of Research on Cancer;
	IATA = International Air Transport Association;
	TSCA = Toxic Substance Control Act;
	HMIS = Hazardous Materials Identification System;
	NFPA = National Fire Protection Association;
	NIOSH = National Institute for Occupational Safety and Health;
	OSHA = Occupational Safety and Health Administration;
	LC50 = Lethal concentration, 50%;
	LD50 = Median lethal dose, 50%;
	MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
	PBT = Persistent, Bioaccumulative and Toxic substance;
	PNEC = Predicted No-Effect Concentration;
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;
	SARA = Superfund Amendments and Reauthorization Act;
	TLV®/TWA = Threshold limit value – time-weighted average;
	TLV®STEL = Threshold limit value – short-time exposure limit;

VOC = Volatile Organic Compounds;

vPvB = very Persistent and very Bioaccumulative;

#### 16.4 Other information

**Classification procedure** 

Skin Irrit. 2: H315 Causes skin irritation. Eye Irrit. 2: H319 Causes serious eye irritation. Skin Sens. 1: H317 May cause an allergic skin reaction. Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.



printed 03.09.2015, Revision 03.09.2015	Version 02. Supersedes version: 01 Page 12 /
Modified position	SECTION 3 been added: Alkyl Ester (Ref.:722 43/00/2012.0028, Germany)
	SECTION 3 been added: Quartz (< 10µm)
	SECTION 3 deleted: Propylene carbonate
	SECTION 2 been added: Does not contain any PBT or vPvB substances.
	SECTION 2 been added: P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	SECTION 2 been added: P302+P352 IF ON SKIN: Wash with plenty of water/soap.
	SECTION 2 deleted: P391 Collect spillage.
	SECTION 2 been added: The product is required to be labelled in accordance with GHS/CL Directives.
	SECTION 2 deleted: The product is classified as hazardous in accordance to OSHA Standa 29 CFR 1910.1200 (HCS 2012)
	SECTION 3 been added: The quartz in this preparation is not available on foreseeable use
	SECTION 4 deleted: Change soaked clothing immediately.
	SECTION 4 been added: Take off contaminated clothing and wash before reuse.
	SECTION 5 deleted: Risk of formation of toxic pyrolysis products.
	SECTION 5 been added: In the event of fire the following can be released:
	SECTION 8 deleted: Tightly fitting goggles.
	SECTION 8 been added: Protect the environment by applying appropriate control measures to prevent or limit emissions.
	SECTION 8 deleted: See SECTION 6+7.
	SECTION 8 been added: safety glasses
	SECTION 11 been added: Calculation method
	SECTION 11 deleted: Sensitizing.
	SECTION 11 been added: May cause an allergic skin reaction.
	SECTION 11 been added: Does not contain any relevant substances fulfilling the classification criteria.
	SECTION 11 been added: Based on the information available, the classification criteria have not been fulfilled.
	SECTION 11 been added: Irritant
	SECTION 12 deleted: The product was classified on the basis of the calculation procedure the preparation directive.
	SECTION 15 deleted: Chemical safety assessments for substances in this mixture were no carried out.
	SECTION 16 been added: Observe employment restrictions for young people.



### **Powers Fasteners, Inc.** Brewster, NY 10509 Date printed 03.09.2015, Revision 11.06.2015 Version 02. Supersedes version: 01 Page 1 / 14 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier PE1000+, Comp. B 1.2 Relevant identified uses of the substance or mixture and uses advised against 1.2.1 Relevant uses Adhesive mortar for fastening to concrete elements B-Component (Hardener) 1.2.2 Uses advised against None known. 1.3 Details of the supplier of the safety data sheet Company Powers Fasteners, Inc. 2 Powers Lane Brewster, NY 10509 / USA Phone +1 800-524-3244 Fax +1 877-871-1965 Address enquiries to Safety Data Sheet sdb@chemiebuero.de 1.4 Emergency telephone number Advisory body Chemtrec: 1-800-424-9300 (Within Continental USA); Chemtrec: 703-527-3887 (Outside USA). **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Acute Tox. 4: H302 Harmful if swallowed. Skin Corr. 1B: H314 Causes severe skin burns and eye damage. Skin Sens. 1: H317 May cause an allergic skin reaction. Eye Dam. 1: H318 Causes serious eye damage. Muta. 2: H341 Suspected of causing genetic defects. Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.



Date printed 03.09.2015, Revisi	on 11.06.2015	Version 02. Supersedes version: 01	Page 2 / 14
2.2 Label elements			
	The product is required	to be labelled in accordance with GHS-Directives.	
Hazard pictograms			
Signal word	DANGER		
Contains:	3-Aminomethyl-3,5,5-t	imethylcyclohexylamine	
	Formaldehyde, oligom	eric reaction products with phenol and m-phenylenebis(m	nethylamine)
	m-Phenylenebis(methy	rlamine)	
	Formaldehyde, oligom diethylenetriamine	eric reaction products with 4,4'-isopropylidenediphenol ar	nd
	Phenol		
	2,2'-Iminodiethylamine		
	4,4'-Isopropylidenedipl	lenol	
	2,4,6-Tris(dimethylami	nomethyl)phenol	
Hazard statements	H317 May cause an al H341 Suspected of ca	kin burns and eye damage. ergic skin reaction.	
Precautionary statemen	P273 Avoid release to P280 Wear protective P301+P330+P331 IF 5 P303+P361+P353 IF 0 Rinse skin with water/s P305+P351+P338 IF I contact lenses, if prese P310 Immediately call P405 Store locked up.	the environment. gloves/protective clothing/eye protection/face protection. WALLOWED: rinse mouth. Do NOT induce vomiting. DN SKIN (or hair): Take off immediately all contaminated	. Remove
2.3 Other hazards			
Human health dangers	People who are allergi	c to amines should avoid the use of the product.	

Human health dangers	People who are allergic to amines should avoid the use of the product.
Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	Further hazards were not determined with the current level of knowledge.



## Brewster, NY 10509

Date printed 03.09.2015, Revision 11.06.2015

Version 02. Supersedes version: 01 Page 3 / 14

#### **SECTION 3: Composition / Information on ingredients**

#### Product-type:

The product is a mixture.

Range [%]	Substance
20 - <35	3-Aminomethyl-3,5,5-trimethylcyclohexylamine
	CAS: 2855-13-2
	GHS: Acute Tox. 4: H302 H312 - Skin Corr. 1B: H314 - Skin Sens. 1: H317 - Eye Dam. 1: H318 - Aquatic Chronic 3: H412
10 - <25	Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)
	CAS: 57214-10-5
	GHS: Skin Corr. 1C: H314 - Eye Dam. 1: H318 - Skin Sens. 1B: H317 - Aquatic Chronic 3: H412
1 - <20	m-Phenylenebis(methylamine)
	CAS: 1477-55-0
	GHS: Acute Tox. 4: H302 - Acute Tox. 4: H332 - Skin Corr. 1B: H314 - Eye Dam. 1: H318 - Skin Sens. 1: H317 - Aquatic Chronic 3: H412
1 - <20	Formaldehyde, oligomeric reaction products with 4,4'-isopropylidenediphenol and diethylenetriamine
	CAS: 77138-45-5
	GHS: Skin Corr. 1B: H314 - Skin Sens. 1: H317 - Eye Dam. 1: H318
1 - <20	Benzyl alcohol
	CAS: 100-51-6
	GHS: Acute Tox. 4: H302 H332 - Eye Irrit. 2: H319
1 - <10	2,4,6-Tris(dimethylaminomethyl)phenol
	CAS: 90-72-2
	GHS: Skin Corr. 1C: H314 - Aquatic Chronic 3: H412 - Skin Sens. 1B: H317
1 - <10	Phenol
	CAS: 108-95-2
	GHS: Muta. 2: H341 - Acute Tox. 3: H301 H311 H331 - STOT RE 2: H373 - Skin Corr. 1B: H314 - Eye Dam. 1: H318
1 - <10	2,2'-Iminodiethylamine
	CAS: 111-40-0
	GHS: Acute Tox. 2: H330 - Acute Tox. 4: H302 H312 - Skin Corr. 1B: H314 - Skin Sens. 1: H317 - STOT SE 3: H335
1 - <5	Bis[(dimethylamino)methyl]phenol
	CAS: 71074-89-0
	GHS: Skin Corr. 1B: H314
1 - <5	4,4'-Isopropylidenediphenol
	CAS: 80-05-7
	GHS: STOT SE 3: H335 - Skin Sens. 1: H317 - Repr. 2: H361f - Eye Dam. 1: H318 - Aquatic Chronic 2: H411

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: see SECTION 16.



Date	printed 03.09.2015, Revision 11.06.2018	5 Version 02. Supersedes version: 01	Page 4 / 1	
SEC	TION 4: First aid measures			
4.1	Description of first aid measures			
	General information	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-hea wounds.	ling	
	Eye contact	In case of contact with eyes rinse thoroughly and immediately with plenty of water a medical advice. Shield unaffected eye. Seek medical advice immediately.	and seek	
	Ingestion	Do not induce vomiting. Seek medical advice immediately. Rinse out mouth and give plenty of water to drink.		
.2	Most important symptoms and e	ffects, both acute and delayed		
		Product is caustic.		
		Allergic reactions		
		Risk of serious damage to eyes.		
4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.		Treat symptomatically.		
SEC	TION 5: Fire-fighting measures			
.1	Extinguishing media			
	Suitable extinguishing media	foam, dry powder, water spray jet, carbon dioxide		
	Extinguishing media that must not be used	Full water jet		
.2	Special hazards arising from the substance or mixture			
		In the event of fire the following can be released:		
		······································		

Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus. Wear full protective suit. Fire residues and contaminated firefighting water must be dispo

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

#### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. High risk of slipping due to leakage/spillage of product.

#### 6.2 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.



Date	Date printed 03.09.2015, Revision 11.06.2015 Version 02. Supersedes version: 01 Page 5 / 14				
Dale	printed 03.03.2013, Revision 11.00.2013				
6.3	Methods and material for contain	ment and cleaning up			
		Take up mechanically. Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth). Dispose of absorbed material in accordance within the regulations.			
6.4	Reference to other sections				
		See SECTION 8+13			
SEC	TION 7: Handling and storage				
7.1	Precautions for safe handling				
		Use only in well-ventilated areas.			
		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.			
7.2	Conditions for safe storage, inclu	uding any incompatibilities			
		Keep only in original container. Prevent penetration into the ground.			
		Do not store together with food and animal food/diet.			
		Keep container in a well-ventilated place. Keep container tightly closed. Protect from heat/overheating and from sun. Keep in a cool place. Store in a dry place. Protect from atmospheric moisture and water. Recommended storage temperature: 5 - 25 °C / 41 - 77 F			
7.3	Specific end use(s)				
		See product use, SECTION 1.2			



## Brewster, NY 10509

Date printed 03.09.2015, Revision 11.06.2015

Version 02. Supersedes version: 01 Page 6 / 14

#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

## Ingredients with occupational exposure limits to be monitored (US)

Range [%]	Substance
1 - <20	m-Phenylenebis(methylamine)
	CAS: 1477-55-0, EINECS/ELINCS: 216-032-5, ECB-Nr.: 01-2119480150-50-XXXX
	Long-term exposure: NIOSH
	Short-term exposure (15-minute): 0,1 mg/m <sup>3</sup>
1 - <10	Phenol
	CAS: 108-95-2, EINECS/ELINCS: 203-632-7, EU-INDEX: 604-001-00-2, ECB-Nr.: 01-2119471329-32-XXXX
	Long-term exposure: 5 ppm, 19 mg/m <sup>3</sup> , NIOSH, OSHA
	Short-term exposure (15-minute): 15,6 ppm, 60 mg/m <sup>3</sup>

#### DNEL

Range [%]	Substance
1 - <10 Phenol, CAS: 108-95-2	
Industrial, dermal, Long-term - systemic effects: 1,23 mg/kg bw/d.	
	Industrial, inhalative, Long-term - systemic effects: 8 mg/m <sup>3</sup> .

#### PNEC

Range [%]	Substance	
1 - <10	Phenol, CAS: 108-95-2	
soil, 0,136 mg/kg dwt		
sediment (seaater), 0,00915 mg/kg dwt		
sediment (freshwater), 0,0915 mg/kg dwt		
seawater, 0,0077 mg/l.		
	freshwater, 0,077 mg/l.	
1 - <10	2,4,6-Tris(dimethylaminomethyl)phenol, CAS: 90-72-2	
	sewage treatment plants (STP), 0,2 mg/l.	
seawater, 0,0084 mg/l.		
freshwater, 0,084 mg/l.		

#### 8.2 Exposure controls

•	
Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Tightly fitting goggles.
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. Nitrile rubber, >480 min (EN 374).
Skin protection	Protective clothing.
	Avoid contact with eyes and skin. Do not inhale gases/vapours. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	If ventilation is insufficient, wear respiratory protection. Short term: filter apparatus, combination filter A-P2.
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.



Brewster, NY 10509

Date printed 03.09.2015, Revision 11.06.2015

Version 02. Supersedes version: 01 Pag

Page 7 / 14

Date	Date printed 03.09.2015, Revision 11.06.2015		Version 02. Supersedes version: 01	Page 7 / 14
SEC	TION 9: Physical and chemical pro	perties		
9.1	Information on basic physical and chemical properties			
	Form	pasty		
	Color	various		
	Odor	amine-like		
	Odour threshold	not determined		
	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]	1,07		
	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		
9.2	Other information	No information available.		
SEC	TION 10: Stability and reactivity			

## 10.1 Reactivity

No dangerous reactions known if used as directed.

#### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

#### 10.3 Possibility of hazardous reactions

Reactions with oxidizing agents. Reactions with strong acids.

#### 10.4 Conditions to avoid

See SECTION 7.2.

#### 10.5 Incompatible materials

See SECTION 10.3.

#### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



#### Brewster, NY 10509

Date printed 03.09.2015, Revision 11.06.2015

Version 02. Supersedes version: 01 Page 8 / 14

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acute toxicity

Product	
ATE-mix, dermal, Rabbit: >2000 mg/kg.	
ATE-mix, oral, Rat: 1000 - <2000 mg/kg.	

Range [%] Sul	ibstance
20 - <35 3-A	Aminomethyl-3,5,5-trimethylcyclohexylamine, CAS: 2855-13-2
LD	050, oral, Rat: 1030 mg/kg.
1 - <10 Phe	nenol, CAS: 108-95-2
LD	050, dermal, Rat: 525-714 mg/kg.
LD	050, oral, Rat: 317 mg/kg.
LC	50, inhalative, Rat: 316 mg/kg.
1 - <5 4,4	4'-Isopropylidenediphenol, CAS: 80-05-7
LD	050, dermal, Rabbit: > 2000 mg/kg.
LD	050, oral, Rat: > 2000 mg/kg.
1 - <10 2,2	2'-Iminodiethylamine, CAS: 111-40-0
LD	050, dermal, Rabbit: 1090 mg/kg.
LD	050, oral, Rat: 1080 mg/kg.
LC	250, inhalative, Rat: > 0,07 - < 0,3 mg/l 4h.
1 - <20 m-ł	Phenylenebis(methylamine), CAS: 1477-55-0
LD	050, dermal, Rabbit: 2000 mg/kg.
LD	050, oral, Rat: 930 mg/kg.
LC	C50, inhalative, Rat: 3,89 mg/l/1h.
LC	C50, inhalative, Rat: 2,4 mg/l/4h.
LC	50, inhalative, Rat (female): 0,8 mg/l/4h.
1 - <10 2,4	4,6-Tris(dimethylaminomethyl)phenol, CAS: 90-72-2
LD	050, dermal, Rat: >1 ml/kg (Lit.).
LD	050, oral, Rat: >2000 mg/kg (Lit.).

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitisation	not determined
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	

his mixture is placed on the market in a form, in which there can be no aerosol formation when used as intended. It may only be used for applications where aerosol formation is excluded. In accordance with Article 6 of the CLP Regulation 1272/2008 / EU, therefore, the classification and labeling for inhalation toxicity is not required. 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.



## Brewster, NY 10509

Date printed 03.09.2015, Revision 11.06.2015

Version 02. Supersedes version: 01 Page 9 / 14

#### SECTION 12: Ecological information

#### 12.1 Toxicity

Range [%] Substance	
1 - <10	Phenol, CAS: 108-95-2
LC50, (96h), Oncorhynchus mykiss: 5 mg/l.	
	EC50, (48h), Daphnia magna: 4,2 mg/l.
	IC50, (96h), Algae: 150 mg/l.
1 - <5	4,4'-Isopropylidenediphenol, CAS: 80-05-7
	LC50, (96h), fish: 7,5 mg/l.
	EC50, (48h), Daphnia magna: 3,9 - 10,2 mg/l.
	EC50, (96h), Algae: 2,5 - 3,1 mg/l.
1 - <10	2,2'-Iminodiethylamine, CAS: 111-40-0
LC50, (96h), Leuciscus idus: 430 mg/L (IUCLID). EC50, (72h), Selenastrum capricornutum: 1164 mg/L (IUCLID).	

#### 12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

#### 12.3 Bioaccumulative potential

No information available.

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

#### 12.6 Other adverse effects

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.



SEC	FION 13: Disposal considerations		
rodu	ıct	Coordinate disposal with the disposal contractor/authorities if necessary.	
Conta	minated 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.	
SEC.	ΓΙΟΝ 14: Transport		
4.1	UN number		
	See SECTION 14.2 in accordance with	UN shipping name	
4.2	UN proper shipping name		
	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 C	<ul> <li>UN/NA 3259 Amines, solid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylam m-phenylenebis(methylamine)) 8 III</li> </ul>	
	- Label		

#### 14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name



## Brewster, NY 10509

Date printed 03.09.2015, Revision 11.06.2015

Version 02. Supersedes version: 01 Page 11 / 14

#### 14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

#### 14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable	not	app	licabl	е
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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 ACGIH: yes - contains crystalline silica Industrial Hygienists - ACGIH International Agency for Research on not determined **Cancer IARC** This product is named NTP - National Toxicology Program (contains crystalline silica). National Toxicology Program - NTP 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

#### **SECTION 16: Other information**

#### 16.1 Hazard statements (SECTION 3)

H411 Toxic to aquatic life with long lasting effects.
H361f Suspected of damaging fertility.
H335 May cause respiratory irritation.
H330 Fatal if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H341 Suspected of causing genetic defects.
H332 Harmful if inhaled.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H302+H332 Harmful if swallowed or if inhaled.
H412 Harmful to aquatic life with long lasting effects.
H318 Causes an allergic skin reaction.
H314 Causes series skin burns and eye damage.

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



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Date printed 03.09.2015, Revision 11.06.2015 Ver	ersion 02. Supersedes version: 01	Page 12 / 14
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## 16.2 Abbreviations and acronyms:

10.2 Abbreviations and acronyms.	
	ACGIH = American Conference of Governmental Industrial Hygienists;
	ADR = Accord européen relatif au transport international des marchandises Dangereuses par
	Route; PID – Deglement concernant le transport international farraviaire de marchandiace
	RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses;
	ADN = Accord européen relatif au transport international des marchandises dangereuses par
	voie de navigation intérieure;
	CAS = Chemical Abstracts Service;
	CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
	CFR = Code of Federal Regulations;
	CPR = Controlled Products Regulations;
	DMEL = Derived Minimum Effect Level; DNEL = Derived No Effect Level:
	DOT = Department of Transportation;
	EC50 = Median effective concentration;
	EPA = Environmental Protection Agency;
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals;
	IATA = International Air Transport Association;
	IBC-Code = International Code for the Construction and Equipment of Ships carrying
	Dangerous Chemicals in Bulk; IC50 = Inhibition concentration, 50%;
	IMDG = International Maritime Code for Dangerous Goods;
	IARC = International Agency of Research on Cancer;
	IATA = International Air Transport Association;
	TSCA = Toxic Substance Control Act;
	HMIS = Hazardous Materials Identification System;
	NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health;
	OSHA = Occupational Safety and Health Administration;
	LC50 = Lethal concentration, 50%;
	LD50 = Median lethal dose, 50%;
	MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
	PBT = Persistent, Bioaccumulative and Toxic substance;
	PNEC = Predicted No-Effect Concentration;
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals; SARA = Superfund Amendments and Reauthorization Act;
	TLV $\mathbb{R}$ /TWA = Threshold limit value – time-weighted average;
	TLV®STEL = Threshold limit value – short-time exposure limit;
	VOC = Volatile Organic Compounds;
	vPvB = very Persistent and very Bioaccumulative;
16.3 Ratings	
HMIS Ratings	
HEALTH	2 2 - Moderate Hazard
FLAMMABILITY	1 1 - Slight Hazard
REACTIVITY	1 - Slight Hazard

#### **NFPA Ratings**



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

X - Personal protection rating to be supplied by user depending on use conditions

## 16.3 Other information

PERSONAL PROTECTION

**Classification procedure** 

Acute Tox. 4: H302 Harmful if swallowed. (Calculation method) Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (Calculation method) Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method) Eye Dam. 1: H318 Causes serious eye damage. (Calculation method) Muta. 2: H341 Suspected of causing genetic defects. (Calculation method) Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)



printed 03.09.2015, Revision 11.06.2015	Version 02. Supersedes version: 01 Page 13 /
Modified position	SECTION 3 been added: 2,4,6-Tris(dimethylaminomethyl)phenol
	SECTION 3 been added: Bis[(dimethylamino)methyl]phenol
	SECTION 3 been added: 4,4'-Isopropylidenediphenol
	SECTION 2 been added: 4,4'-Isopropylidenediphenol
	SECTION 2 been added: 2,4,6-Tris(dimethylaminomethyl)phenol
	SECTION 2 been added: H302 Harmful if swallowed.
	SECTION 2 been added: Does not contain any PBT or vPvB substances.
	SECTION 2 deleted: The product is classified as hazardous in accordance to OSHA Standa 29 CFR 1910.1200 (HCS 2012)
	SECTION 2 deleted: H302+H312+H332 Harmful if swallowed, in contact with skin or if inhale
	SECTION 2 been added: Eye Dam. 1
	SECTION 2 been added: H318 Causes serious eye damage.
	SECTION 2 deleted: P260 Do not breathe vapours.
	SECTION 2 deleted: Contains [x] % of components with unknown hazards to the aquatic environment.
	SECTION 2 been added: The product is required to be labelled in accordance with GHS/CL Directives.
	SECTION 2 deleted: P333+P313 If skin irritation or rash occurs: Get medical advice/attention
	SECTION 2 deleted: P363 Wash contaminated clothing before reuse.
	SECTION 2 been added: P405 Store locked up.
	SECTION 2 deleted: P308+P313 IF exposed or concerned: Get medical advice/attention.
	SECTION 2 deleted: [x] % of the mixture consists of ingredient(s) of unknown toxicity.
	SECTION 4 been added: Risk of serious damage to eyes.
	SECTION 4 been added: Shield unaffected eye.
	SECTION 4 been added: In case of contact with eyes rinse thoroughly and immediately with plenty of water and seek medical advice.
	SECTION 4 deleted: Rinse cautiously with water for several minutes. Remove contact lense if present and easy to do. Continue rinsing.
	SECTION 5 been added: In the event of fire the following can be released:
	SECTION 5 deleted: Risk of formation of toxic pyrolysis products.
	SECTION 7 been added: Protect from heat/overheating and from sun.
	SECTION 8 been added: Protect the environment by applying appropriate control measures to prevent or limit emissions.
	SECTION 8 deleted: See SECTION 6+7.
	SECTION 8 been added: Do not inhale gases/vapours.
	SECTION 8 deleted: Do not inhale gases/vapours/aerosols.
	SECTION 9 deleted:
	SECTION 9 deleted:
	SECTION 9 been added: various
	SECTION 9 deleted: red
	SECTION 11 deleted: The product was classified on the basis of the calculation procedure the preparation directive.
	SECTION 11 deleted: Sensitizing.
	SECTION 11 been added: his mixture is placed on the market in a form, in which there can be no aerosol formation when used as intended. It may only be used for applications where aerosol formation is excluded. In accordance with Article 6 of the CLP Regulation 1272/2008 EU, therefore, the classification and labeling for inhalation toxicity is not required.
	SECTION 11 deleted: Product is caustic.



Date printed 03.09.2015, Revision 11.06.2015	Version 02. Supersedes version: 01 Page 14 / 14
	SECTION 12 deleted: The product was classified on the basis of the calculation procedure of the preparation directive.
	SECTION 15 deleted: Chemical safety assessments for substances in this mixture were not carried out.
	SECTION 16 been added: Calculation method
	SECTION 16 been added: Calculation method
	SECTION 16 been added: Observe employment restrictions for young people.
	SECTION 16 been added: Observe employment restrictions for mothers-to-be and nursing mothers.

SECTION 16 deleted:

SECTION 16 deleted: