1. Identification

Product identifier
PE 1000+, Comp. A

Recommended use of the chemical and restrictions on use

Use of the substance/mixture
Adhesive mortar for fastening elements A-component (resin)

Uses advised against
no restriction

Details of the supplier of the safety data sheet

Company name: DEWALT Industrial Tool Co.
Street: 701 East Joppa Road
Place: USA Towson, MD 21286
Telephone: +1 800 524-3244
Telefax: +1 877 871-1965

Emergency phone number:
CHEMTREC USA: +1 800 424 9300 (24/7)
CHEMTREC International: +1 703 527 3887 (24/7)

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Respiratory or skin sensitization: Skin Sens. 1

Label elements

29 CFR Part 1910.1200
Signal word: Warning

Pictograms:

Hazard statements

Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements

Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulation.

Hazards not otherwise classified

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

3. Composition/information on ingredients
Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1675-54-3</td>
<td>2,2-Bis(4-glycidyloxyphenyl)propane</td>
<td>25 - 50 %</td>
</tr>
<tr>
<td>9003-36-5</td>
<td>Bisphenol-F-epichlorohydrin resin MW &lt;= 700</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-Bis(2,3-epoxypropoxy)hexane</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td></td>
<td>Alkyl Ester (Ref.: 722 43/00/2012.0028, Germany)</td>
<td>1 - 10 %</td>
</tr>
</tbody>
</table>

Further Information

The actual concentration is withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General information
First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

After inhalation
Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion
Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

Most important symptoms and effects, both acute and delayed
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.

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

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Foam
Extinguishing powder
Water spray jet
Carbon dioxide (CO2)

Unsuitable extinguishing media
Full water jet

Specific hazards arising from the chemical
Pyrolysis products, toxic
Carbon monoxide

Special protective equipment and precautions for fire-fighters
In case of fire and/or explosion do not breathe fumes.
Wear a self-contained breathing apparatus and chemical protective clothing.
Additional information
Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Do not breathe gas/fume/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions
Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up
Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up: Sand.
Treat the recovered material as prescribed in the section on waste disposal.
Retain contaminated washing water and dispose it.

Reference to other sections
Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling
Use only outdoors or in a well-ventilated area.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed.
Store in a place accessible by authorized persons only.
Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage
Do not store together with: Oxidising agent, strong
Do not use for products which come into contact with the food stuffs.

Further information on storage conditions
Storage temperature: 41 °F - 95 °F

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>f/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Silica, crystalline (as respirable dust)</td>
<td>-</td>
<td>0.05</td>
<td>TWA (8 h)</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>14808-60-7</td>
<td>Silica, crystalline quartz, respirable dust</td>
<td>(Z-3)</td>
<td>(Z-3)</td>
<td>TWA (8 h)</td>
<td>PEL</td>
<td></td>
</tr>
</tbody>
</table>

Additional advice on limit values
This mixture includes quartz (silica) which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded.

Exposure controls
Appropriate engineering controls
Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection
Wear eye protection/face protection. Wear safety goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Hand protection
Wear chemical resistant protective gloves.

Skin protection
Wear suitable protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Should a respirator be needed, follow OSHA regulation for respirator use (29 CFR 1910.134). Wear an air-purifying NIOSH-certified (or equivalent) respirator (with a high efficiency particulate filter) as needed.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Paste</td>
</tr>
<tr>
<td>Color</td>
<td>light beige</td>
</tr>
<tr>
<td>pH-Value</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not determined</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not determined</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td></td>
</tr>
<tr>
<td>Not oxidising</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>not determined</td>
</tr>
<tr>
<td>Density (at 20 °C)</td>
<td>1.49 g/cm³</td>
</tr>
</tbody>
</table>
### Water solubility

The study does not need to be conducted because the substance is known to be insoluble in water.

### Solubility in other solvents

- **Partition coefficient**: not determined
- **Vapor density**: not determined
- **Evaporation rate**: not determined

### Other information

- **Solid content**: not determined

---

### 10. Stability and reactivity

#### Reactivity

No hazardous reaction when handled and stored according to provisions.

#### Chemical stability

The product is stable under storage at normal ambient temperatures.

#### Possibility of hazardous reactions

Violent reaction with: Oxidising agent, strong

#### Conditions to avoid

- **none/none**

#### Incompatible materials

Keep away from: Oxidizing agent

#### Hazardous decomposition products

No known hazardous decomposition products.

---

### 11. Toxicological information

#### Information on toxicological effects

- **Acute toxicity**
  
  Based on available data, the classification criteria are not met.
### Components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1675-54-3</td>
<td>2,2-Bis(4-glycidyloxyphenyl)propane</td>
<td>oral</td>
<td>LD50</td>
<td>Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9003-36-5</td>
<td>Bisphenol-F-epichlorohydrin resin MW &lt;= 700</td>
<td>oral</td>
<td>LD50</td>
<td>Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-Bis(2,3-epoxypropoxy)hexane</td>
<td>oral</td>
<td>LD50</td>
<td>Rat</td>
<td>OECD 401</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2190</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>Rat</td>
<td>OECD 402</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) vapour</td>
<td>LC50</td>
<td>Rat</td>
<td>0,035 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alkyl Ester (Ref.: 722 43/00/2012.0028, Germany)</td>
<td>oral</td>
<td>LD50</td>
<td>Mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Irritation and corrosivity**
- Causes skin irritation
- Causes serious eye irritation

**Sensitizing effects**
- May cause an allergic skin reaction (2,2-Bis(4-glycidyloxyphenyl)propane; Bisphenol-F-epichlorohydrin resin MW <= 700; 1,6-Bis(2,3-epoxypropoxy)hexane)

**Carcinogenic/mutagenic/toxic effects for reproduction**
- Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure**
- Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure**
- Based on available data, the classification criteria are not met.

**Carcinogenicity (OSHA):**
- No ingredient of this mixture is listed.

**Carcinogenicity (IARC):**
- Bisphenol A diglycidyl ether (Araldite) (CAS 1675-54-3) is listed in group 3. Silica dust, crystalline, in the form of quartz or cristobalite (CAS 14808-60-7) is listed in group 1. Silica dust, crystalline, in the form of quartz or cristobalite (CAS 14808-60-7) is listed in group 1.

**Carcinogenicity (NTP):**
- No ingredient of this mixture is listed.

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

### 12. Ecological information

**Ecotoxicity**
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Persistence and degradability**
- The product has not been tested.

**Bioaccumulative potential**
According to 29 CFR 1910.1200(g)

Safety Data Sheet

Revision date: 20.03.2020

PE 1000+, Comp. A

The product has not been tested.

Mobility in soil
The product has not been tested.

Other adverse effects
No information available.

Further information
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

Waste treatment methods

Advice on disposal
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number: UN 3077
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Bisphenol-F-Epoxy resin)

Transport hazard class(es): 9
Packing group: III
Hazard label: 9

Limited quantity: 5 kg

Marine transport (IMDG)

UN number: UN 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol-F-Epoxy resin)

Transport hazard class(es): 9
Packing group: III
Hazard label: 9

Special Provisions: 274, 335, 966, 967, 969
Limited quantity: 5 kg
Excepted quantity: E1
EmS: F-A, S-F

Other applicable information (marine transport)
No dangerous goods in packaging until 5kg according 2.10.2.7 IMDG-Code

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 3077
Safety Data Sheet

PE 1000+, Comp. A

Revision date: 20.03.2020

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. 
(Bisphenol-F-Epoxy resin)

Transport hazard class(es): 9
Packing group: III
Hazard label: 9

Special Provisions: A97 A158 A179 A197
Limited quantity Passenger: 30 kg G
Passenger LQ: Y956
Exception quantity: E1
IATA-packing instructions - Passenger: 956
IATA-max. quantity - Passenger: 400 kg
IATA-packing instructions - Cargo: 956
IATA-max. quantity - Cargo: 400 kg

Other applicable information (air transport)
No dangerous goods in packaging until 5kg according A197 IATA-DGA

Environmental hazards
ENVIRONMENTALLY HAZARDOUS: yes

Special precautions for user
No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory information

U.S. Regulations
National Inventory TSCA
All ingredients of this mixture are included on the TSCA Inventory.

National regulatory information
RA Section 311/312 Hazards:
2,2-Bis(4-glycidyloxyphenyl)propane (1675-54-3): Immediate (acute) health hazard
Bisphenol-F-epichlorohydrin resin MW <= 700 (9003-36-5): Immediate (acute) health hazard
1,6-Bis(2,3-epoxypropoxy)hexane (16096-31-4): Immediate (acute) health hazard
Alkyl Ester (Ref.: 722 43/00/2012.0028, Germany) (-): Immediate (acute) health hazard

State Regulations
Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Additional information
This mixture includes quartz (silica) which is firmly bound in the pasty component, and therefore not freely available during use, so that a risk of dust inhalation is excluded, thus the product does not cause a harm effect. Silica is listed in the Proposition 65 list.

16. Other information
Hazardous Materials Information Label (HMIS)

- Health: 2
- Physical Hazard: 1
- Personal Protection: -

NFPA Hazard Ratings

- Health: 2
- Flammability: -
- Reactivity: 1
- Unique Hazard: -

Changes

- Revision date: 20.03.2020
- Revision No: 1,08

This data sheet contains changes from the previous version in section(s): 3,14.

Abbreviations and acronyms

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- EC50: Effective concentration, 50%
- ErC50: EC50 in terms of reduction of growth rate
- IATA: International Air Transport Association
- IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA)
- IARC: International Agency for Research on Cancer
- IMDG: International Maritime Code for Dangerous Goods
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%
- NFPA: National Fire Protection Association
- NIOSH: National Institute for Occupational Safety and Health
- NOEC: No Observed Effect Concentration
- NTP: National Toxicology Program
- OECD: Organisation for Economic Co-operation and Development
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- SARA: Superfund Amendments and Reauthorization Act
- TLV: Threshold Limit Values
- TSCA: Toxic Substances Control Act

Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)
1. Identification

Product identifier
PE 1000+, Comp. B

Recommended use of the chemical and restrictions on use
Use of the substance/mixture
compound mortar B-component (hardener)

Uses advised against
no restriction

Details of the supplier of the safety data sheet
Company name: DEWALT Industrial Tool Co.
Street: 701 East Joppa Road
Place: USA Towson, MD 21286
Telephone: +1 800 524-3244
Telefax:+1 877 871-1965
CHEMTREC USA: +1 800 424 9300 (24/7)
CHEMTREC International: +1 703 527 3887 (24/7)

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Acute toxicity: Acute Tox. 4 (oral)
Acute toxicity: Acute Tox. 4 (dermal)
Skin corrosion/irritation: Skin Corr. 1B
Respiratory or skin sensitization: Skin Sens. 1
Germ cell mutagenicity: Muta. 2
Reproductive toxicity: Repr. 1B
Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

Label elements

29 CFR Part 1910.1200
Signal word: Danger

Pictograms:

Hazard statements
Harmful if swallowed or in contact with skin
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of causing genetic defects
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure

Precautionary statements
Obtain special instructions before use.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor. 
Store locked up. 
Dispose of contents/container in accordance with local/regional/national/international regulation.

**Hazardous materials not otherwise classified**
Contains Amines. May produce an allergic reaction.

### 3. Composition/information on ingredients

#### Mixtures

**Hazardous components**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2855-13-2</td>
<td>3-Aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>30 - &lt; 40 %</td>
</tr>
<tr>
<td>1950616-36-0</td>
<td>Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)</td>
<td>15 - &lt; 25 %</td>
</tr>
<tr>
<td>77138-45-5</td>
<td>Formaldehyde, oligomeric reaction products with 4,4’-isopropylidenediphenol and diethylenetriamine</td>
<td>15 - &lt; 25 %</td>
</tr>
<tr>
<td>1477-55-0</td>
<td>m-Phenylenebis(methylamine)</td>
<td>15 - &lt; 25 %</td>
</tr>
<tr>
<td>90-72-2</td>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>100-51-6</td>
<td>Benzy alcohol</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>111-40-0</td>
<td>Diethylenetriamine</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>108-95-2</td>
<td>Phenol</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>71074-89-0</td>
<td>Bis[(dimethylamino)methyl]phenol</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>80-05-7</td>
<td>Bisphenol A</td>
<td>1 - &lt; 5 %</td>
</tr>
</tbody>
</table>

**Further Information**
The actual concentration is withheld as a trade secret.

### 4. First-aid measures

**Description of first aid measures**

**General information**
First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

**After inhalation**
Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

**After contact with skin**
After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

**After contact with eyes**
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**
Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

**Most important symptoms and effects, both acute and delayed**
Harmful if swallowed. 
Causes severe skin burns and eye damage. 
May cause an allergic skin reaction. 
Suspected of causing genetic defects. 
May damage fertility.

**Indication of any immediate medical attention and special treatment needed**
5. Fire-fighting measures

Extinguishing media
- Suitable extinguishing media
  - Foam
  - Extinguishing powder
  - Water spray jet
  - Carbon dioxide (CO2)
- Unsuitable extinguishing media
  - Full water jet

Specific hazards arising from the chemical
- Pyrolysis products, toxic
- Carbon monoxide

Special protective equipment and precautions for fire-fighters
- In case of fire and/or explosion do not breathe fumes.
- Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

Additional information
- Supress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
- Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Provide adequate ventilation.

Environmental precautions
- Avoid release to the environment. Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up
- Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up:
  - Sand
- Treat the recovered material as prescribed in the section on waste disposal.
- Retain contaminated washing water and dispose it.

Reference to other sections
- Safe handling: see section 7
- Personal protection equipment (PPE): see section 8
- Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling
- Use only outdoors or in a well-ventilated area.
- Wear personal protection equipment (refer to section 8).
- Avoid contact with skin, eyes and clothes.
- When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
- Keep container tightly closed.
- Store in a place accessible by authorized persons only.
- Keep only in the original container in a cool, well-ventilated place.
Hints on joint storage
Do not store together with: Oxidising agent, strong, Organic peroxides
Do not use for products which come into contact with the food stuffs.

Further information on storage conditions
storage temperature: 41 °F - 95 °F

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>TWA (8 h)</th>
<th>TWA (8 h)</th>
<th>TWA (8 h)</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-40-0</td>
<td>Diethylenetriamine</td>
<td>REL</td>
<td>REL</td>
<td>REL</td>
<td>REL</td>
</tr>
<tr>
<td>108-95-2</td>
<td>Phenol</td>
<td>REL</td>
<td>PEL</td>
<td>Ceiling</td>
<td>REL</td>
</tr>
</tbody>
</table>

Exposure controls

Appropriate engineering controls
Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Protective and hygiene measures
Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat, drink or smoke. Avoid contact during pregnancy/while nursing.

Eye/face protection
Wear eye protection/face protection.
Wear safety goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Hand protection
Wear chemical resistant protective gloves.

Skin protection
Wear suitable protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Should a respirator be needed, follow OSHA regulation for respirator use (29 CFR 1910.134). Wear an air-purifying NIOSH-certified (or equivalent) respirator (with a high efficiency particulate filter) as needed.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Paste
Color: black / red
Odor: characteristic
pH-Value: not applicable

Changes in the physical state
**Safety Data Sheet**

department to 29 CFR 1910.1200(g)

**PE 1000+, Comp. B**

**Revision date:** 20.03.2020

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
</tr>
<tr>
<td>Solid:</td>
<td>not determined</td>
</tr>
<tr>
<td>Gas:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
</tr>
<tr>
<td>Solid:</td>
<td>not determined</td>
</tr>
<tr>
<td>Gas:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>not determined</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td></td>
</tr>
<tr>
<td>Not oxidising,</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>not determined</td>
</tr>
<tr>
<td>Density (at 20 °C):</td>
<td>1.07 g/cm³</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>The study does not need to be conducted because the substance is known to be insoluble in water.</td>
</tr>
<tr>
<td>Solubility in other solvents:</td>
<td>not determined</td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>not determined</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>Solid content:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

**10. Stability and reactivity**

**Reactivity**

see section  10.3

**Chemical stability**

The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

Violent reaction with: Oxidising agent

**Conditions to avoid**

see section  7.2

**Incompatible materials**

Oxidising agent, strong

**Hazardous decomposition products**

No known hazardous decomposition products.

**11. Toxicological information**

**Information on toxicological effects**

**Acute toxicity**
# Safety Data Sheet

**PE 1000+, Comp. B**

**Harmful if swallowed**
**Harmful in contact with skin**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2855-13-2</td>
<td>3-Aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>oral</td>
<td>LD50</td>
<td>1030</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>ATE</td>
<td>mg/kg</td>
<td>1100</td>
<td></td>
</tr>
<tr>
<td>1477-55-0</td>
<td>m-Phenylenebis(methylamine)</td>
<td>oral</td>
<td>LD50</td>
<td>930</td>
<td>mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>2000</td>
<td>mg/kg</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (1 h) vapour</td>
<td>LC50</td>
<td>3,89</td>
<td>mg/l</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE</td>
<td>1,5</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td>90-72-2</td>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>oral</td>
<td>ATE</td>
<td>500</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>100-51-6</td>
<td>Benzyl alcohol</td>
<td>oral</td>
<td>LD50</td>
<td>1230</td>
<td>mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE</td>
<td>11</td>
<td>mg/l</td>
<td>GESTIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE</td>
<td>1,5</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td>111-40-0</td>
<td>Diethylenetriamine</td>
<td>oral</td>
<td>LD50</td>
<td>1080</td>
<td>mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>1054</td>
<td>mg/kg</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE</td>
<td>0,5</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE</td>
<td>0,05</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td>108-95-2</td>
<td>Phenol</td>
<td>oral</td>
<td>LD50</td>
<td>317</td>
<td>mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>630</td>
<td>mg/kg</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE</td>
<td>3</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE</td>
<td>0,5</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td>71074-89-0</td>
<td>Bis(dimethylamino)methylphenol</td>
<td>oral</td>
<td>ATE</td>
<td>500</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>80-05-7</td>
<td>Bisphenol A</td>
<td>oral</td>
<td>LD50</td>
<td>3250</td>
<td>mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>3000</td>
<td>mg/kg</td>
<td>Rabbit</td>
</tr>
</tbody>
</table>

**Irritation and corrosivity**
**Causes severe skin burns and eye damage**

---

**Revision No: 1.05 - Replaces version: 1.04**

USA - EN

Print date: 20.03.2020

---
Sensitizing effects

May cause an allergic skin reaction (3-Aminomethyl-3,5,5-trimethylcyclohexylamine; Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine); Formaldehyde, oligomeric reaction products with 4,4’-isopropylidenediphenol and diethylenetriamine; m-Phenylenebis(methylamine); Diethylenetriamine; Bisphenol A)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects (Phenol)
May damage fertility or the unborn child (Bisphenol A)
Carcinogenicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

May cause damage to organs through prolonged or repeated exposure (Phenol)
Carcinogenicity (IARC): Phenol (CAS 108-95-2) is listed in group 3.

Aspiration hazard

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

12. Ecological information

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number: UN 3259

Proper shipping name: AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))

Transport hazard class(es): 8

Packing group: II

Hazard label: 8
## Marine transport (IMDG)

**UN number:** UN 3259  
**UN proper shipping name:** AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))  
**Transport hazard class(es):** 8  
**Packing group:** II  
**Hazard label:** 8

**Special Provisions:** 223, 274  
**Limited quantity:** 1 kg  
**Excepted quantity:** E2  
**EmS:** F-A, S-B

## Air transport (ICAO-TI/IATA-DGR)

**UN number:** UN 3259  
**UN proper shipping name:** AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))  
**Transport hazard class(es):** 8  
**Packing group:** II  
**Hazard label:** 8

**Special Provisions:** A3 A803  
**Limited quantity Passenger:** 5 kg  
**Passenger LOQ:** Y844  
**Excepted quantity:** E2  
**IATA-packing instructions - Passenger:** 859  
**IATA-max. quantity - Passenger:** 15 kg  
**IATA-packing instructions - Cargo:** 863  
**IATA-max. quantity - Cargo:** 50 kg

### Environmental hazards

**ENVIRONMENTALLY HAZARDOUS:** no

### Special precautions for user

**Warning:** strongly corrosive.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**not applicable**

## 15. Regulatory information

### U.S. Regulations

#### National Inventory TSCA

All ingredients of this mixture are included on the TSCA Inventory.

#### National regulatory information

**RA Section 302 Extremely hazardous substances:**  
Phenol (108-95-2): Reportable quantity = 1,000 lbs., Threshold planning quantity = 500/10,000 lbs.
RA Section 304 CERCLA:
Phenol (108-95-2): Reportable quantity = 1,000 (454) lbs. (kg)
RA Section 311/312 Hazards:
3-Aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2): Immediate (acute) health hazard
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (1950616-36-0): Immediate (acute) health hazard
Formaldehyde, oligomeric reaction products with 4,4'-isopropylidenediphenol and diethylenetriamine (77138-45-5): Immediate (acute) health hazard
m-Phenylenebis(methylamine) (1477-55-0): Immediate (acute) health hazard
2,4,6-Tris(dimethylaminomethyl)phenol (90-72-2): Immediate (acute) health hazard
Benzyl alcohol (100-51-6): Immediate (acute) health hazard
Diethylenetriamine (111-40-0): Immediate (acute) health hazard
Phenol (108-95-2): Immediate (acute) health hazard, Delayed (chronic) health hazard
Bis[(dimethylamino)methyl]phenol (71074-89-0): Immediate (acute) health hazard
4,4'-Isopropylidenediphenol (80-05-7): Immediate (acute) health hazard
RA Section 313 Toxic release inventory:
Phenol (108-95-2): De minimis limit = 1.0 %, Reportable threshold = Standard
4,4'-Isopropylidenediphenol (80-05-7): De minimis limit = 1.0 %, Reportable threshold = Standard

State Regulations
Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
WARNING: This product can expose you to chemicals including Bisphenol A (BPA) (reproductive), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Additional information
For more information go to www.P65Warnings.ca.gov.

16. Other information

Hazardous Materials Information Label (HMIS)
Health: 2
Physical Hazard: 1
Personal Protection: -

NFPA Hazard Ratings
Health: 2
Flammability: -
Reactivity: 1
Unique Hazard: -

Changes
Revision date: 19.03.2020
Revision No: 1.05
This data sheet contains changes from the previous version in section(s): 3.

Abbreviations and acronyms
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
EC50: Effective concentration, 50%
ErC50: EC50 in terms of reduction of growth rate
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA)
IARC: International Agency for Research on Cancer
IMDG: International Maritime Code for Dangerous Goods
Safety Data Sheet

according to 29 CFR 1910.1200(g)

PE 1000+, Comp. B

Revision date: 20.03.2020

LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
NFPA: National Fire Protection Association
NIOSH: National Institute for Occupational Safety and Health
NOEC: No Observed Effect Concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
SARA: Superfund Amendments and Reauthorization Act
TLV: Threshold Limit Values
TSCA: Toxic Substances Control Act

Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)