

Safety Data Sheet

acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

- **Product Identifier**
 - **Trade Name:** EP1400 B
 - **Application of the Substance or Mixture:** Epoxy Hardener
- **Details of the Supplier of the Safety Data Sheet (SDS)**
 - **Manufacturer or Supplier:**
Resinlab, LLC
N109 W13300 Ellsworth Drive,
Germantown, WI 53022
1-800-388-8605
www.resinlab.com
 - **Information Department:** Product Safety Department:
msds@resinlab.com
 - **Emergency Telephone Number:**
North America - Chemtrec: 1-800-424-9300 (24 hours)
International - Chemtrec: 01-703-527-3667 (24 hours)

2 Hazard(s) identification

- **Hazard Classification**
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.
- **Label Elements**
 - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
 - **Pictogram(s)**



GHS05 GHS07

- **Signal Word** Danger
- **Hazard-determining Component(s)**
Fatty acids, tall-oil, reaction products with tetraethylenepentamine
N-(2-Aminoethyl)piperazine
Tetraethylenepentamine
Bisphenol-A-(epichlorohydrin) epoxy resin
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
Do not breathe dusts or mists.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
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.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If swallowed: Rinse mouth. Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**
20.7 % of the mixture consists of component(s) of unknown toxicity.

- **Hazard Rating System**
 - **NFPA System**
 - **NFPA Ratings (scale 0 - 4)**



NFPA special hazards (water reactivity and oxidizing property): None

- **HMIS System**
 - **HMIS Ratings (scale 0 - 4)**
- | | |
|------------|----|
| HEALTH | *3 |
| FIRE | 1 |
| REACTIVITY | 0 |
- Health = *3
Fire = 1
Reactivity = 0

- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

Safety Data Sheet

acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 1)

3 Composition/information on ingredients

Chemical Characterization: Mixtures
Composition/Information on Ingredients

| | | |
|---|--|---------|
| CAS: 68953-36-6 EINECS: 273-201-6 | Fatty acids, tall-oil, reaction products with tetraethylenepentamine Skin Corr. 1A, H314 Skin Sens. 1, H317 | 30-40% |
| CAS: 13560-89-9 EINECS: 236-948-9 | Bis(hexachlorocyclopentadieno) STOT RE 2, H373 | 20-30% |
| CAS: 65997-17-3 EINECS: 266-046-0 | Fibrous Glass | 20-30% |
| CAS: 140-31-8 EINECS: 205-411-0 Index Number: 612-105-00-4 RTECS: TK 8050000 | N-(2-Aminoethyl)piperazine Acute Tox. 3, H311 Skin Corr. 1B, H314 Acute Tox. 4, H302; Skin Sens. 1, H317 Aquatic Chronic 3, H412 | 10-20% |
| CAS: 112-57-2 EINECS: 203-986-2 Index Number: 612-060-00-0 RTECS: KH8585000 | Tetraethylenepentamine Skin Corr. 1B, H314 Aquatic Chronic 2, H411 Acute Tox. 4, H312 | 2.5-5% |
| CAS: 67762-90-7 EC number: 614-122-2 | Siloxanes and Silicones, di-Me, reaction products with silica | 1-2.5% |
| CAS: 25068-38-6 NLP: 500-033-5 Index Number: 603-074-00-8 | Bisphenol-A-(epichlorohydrin) epoxy resin Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317 | 1-<2.5% |
| CAS: 112926-00-8 | Precipitated silica (Silica-Amorphous) | 0.1-1% |
| CAS: 78-78-4 EINECS: 201-142-8 Index Number: 601-085-00-3 RTECS: EK 4430000 | isopentane Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Acute 2, H401 | 0.1-1% |
| CAS: 1333-86-4 EINECS: 215-609-9 RTECS: FF5800000 | Carbon black | 0-<0.1% |

Additional Information:

If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

4 First-aid measures

Description of First Aid Measures
General Information

Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.

After Inhalation

Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.

After Skin Contact

Immediately remove all contaminated clothing and put them in a tightly sealed bag. Immediately wash contaminated skin with water and soap and rinse them thoroughly. Get medical attention

After Eye Contact

Immediately rinse opened eyes for at least 15 minutes under running water. Immediately remove contact lenses if present. Continue rinsing. Do not put any ointments, oils or medication in eyes without specific instructions. Seek medical advice.

After Swallowing

If victim is unconscious; never give anything by mouth. If victim is conscious; rinse out mouth and give victim small amounts of water. Do NOT induce vomiting. Get medical attention

Information for Doctor
Indication of any Immediate Medical Attention and Special Treatment Needed

Check section 11 Toxicological Information for further relevant information.

5 Fire-fighting measures

Extinguishing Media
Suitable Extinguishing Agent(s)

Use fire fighting measures and extinguishing agents that suit the environment.

In case of fire, suitable extinguishing agents are:

Alcohol resistant foam.

Dry chemical or fire-extinguishing powder.

Carbon dioxide (CO₂).

Water spray or water fog.

(Contd. on page 3)

US

Safety Data Sheet acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 2)

- **Unsuitable Extinguishing Agent(s)** Water with full jet
- **Firefighting Procedures**
Solid stream of water may spread fire; use water spray or water fog.
Cool all affected containers with flooding quantities of water.
Apply water from as far as a distance as possible.
- **Special Hazards Arising in Fire**
In case of fire, following can be released:
Phenolic compounds
Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires.
Carbon dioxide (CO₂) and Carbon monoxide (CO)
Nitrogen oxides
- **Advice for Firefighters**
If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).
As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.
- **Additional Information** Ensure adequate and functional fire fighting facilities equipped in working area at all times.

6 Accidental release measures

- **Personal Precautions**
Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.
Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.
- **Environmental Precautions** No further relevant information.
- **Cleaning Up Methods**
Ensure adequate ventilation.
Eliminate all ignition sources.
Keep unauthorized personnel away.
Absorb residues with liquid-binding materials.
Ventilate and wash area after clean-up is complete.
Collect spills in suitable and properly labeled containers.
Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.
Dispose contaminated chemicals as waste according to Section 13.
- **Protective Action Criteria for Chemicals**

· PAC-1:

| | | |
|-------------|---|-----------------------|
| 65997-17-3 | Fibrous Glass | 15 mg/m ³ |
| 140-31-8 | N-(2-Aminoethyl)piperazine | 6.4 mg/m ³ |
| 112-57-2 | Tetraethylenepentamine | 15 mg/m ³ |
| 67762-90-7 | Siloxanes and Silicones, di-Me, reaction products with silica | 120 mg/m ³ |
| 25068-38-6 | Bisphenol-A-(epichlorohydrin) epoxy resin | 90 mg/m ³ |
| 112926-00-8 | Precipitated silica (Silica-Amorphous) | 18 mg/m ³ |
| 78-78-4 | isopentane | 3000* ppm |
| 1333-86-4 | Carbon black | 9 mg/m ³ |

· PAC-2:

| | | |
|-------------|---|-------------------------|
| 65997-17-3 | Fibrous Glass | 170 mg/m ³ |
| 140-31-8 | N-(2-Aminoethyl)piperazine | 71 mg/m ³ |
| 112-57-2 | Tetraethylenepentamine | 130 mg/m ³ |
| 67762-90-7 | Siloxanes and Silicones, di-Me, reaction products with silica | 1,300 mg/m ³ |
| 25068-38-6 | Bisphenol-A-(epichlorohydrin) epoxy resin | 990 mg/m ³ |
| 112926-00-8 | Precipitated silica (Silica-Amorphous) | 200 mg/m ³ |
| 78-78-4 | isopentane | 33000*** ppm |
| 1333-86-4 | Carbon black | 99 mg/m ³ |

· PAC-3:

| | | |
|-------------|---|-------------------------|
| 65997-17-3 | Fibrous Glass | 990 mg/m ³ |
| 140-31-8 | N-(2-Aminoethyl)piperazine | 420 mg/m ³ |
| 112-57-2 | Tetraethylenepentamine | 790 mg/m ³ |
| 67762-90-7 | Siloxanes and Silicones, di-Me, reaction products with silica | 7,900 mg/m ³ |
| 25068-38-6 | Bisphenol-A-(epichlorohydrin) epoxy resin | 5,900 mg/m ³ |
| 112926-00-8 | Precipitated silica (Silica-Amorphous) | 1,200 mg/m ³ |
| 78-78-4 | isopentane | 200000*** ppm |
| 1333-86-4 | Carbon black | 590 mg/m ³ |

7 Handling and storage

- **Handling**
- **Precautions for Safe Handling**
Do not breathe dust created by sanding, grinding or machining.
Do not breathe dust/fume/gas/mist/vapor/spray.
Keep away from incompatible material(s).
Avoid any release into the environment.
For industrial or professional use only.
Observe all the personal protection requirements in Section 8.
- **Information about Protection Against Explosions and Fires**
Keep away from heat, sparks, open flame and other ignition sources during handling.

(Contd. on page 4)

Safety Data Sheet acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 3)

Be prepared with respirators.

- **Storage**

- **Requirements to be Met by Storerooms and Receptacles**

- Store in a well-ventilated place; provide ventilation for receptacles.

- Keep stored in accordance with local, regional, national, and international regulations.

- **Additional Information** No further relevant information.

8 Exposure controls/personal protection

- **Engineering Measures or Controls**

- **Exposure Limit Values that Require Monitoring at the Workplace**

- The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

13560-89-9 Bis(hexachlorocyclopentadieno)

| | |
|-----|--|
| TWA | Short-term value: 1 mg/m ³ MFG recommendation 8 hour TWA |
|-----|--|

65997-17-3 Fibrous Glass

| | |
|-----------|---------------------------------------|
| ACGIH TLV | Long-term value: 10 mg/m ³ |
| OSHA PEL | Long-term value: 15 mg/m ³ |
| | Total dust |

140-31-8 N-(2-Aminoethyl)piperazine

| | |
|--------|--|
| TEEL-1 | Short-term value: 7.5 mg/m ³ |
| TEEL-2 | Short-term value: 50.0 mg/m ³ |
| TEEL-3 | Short-term value: 500 mg/m ³ |

112-57-2 Tetraethylenepentamine

| | |
|------|--|
| WEEL | Long-term value: 5 mg/m ³ Skin; DSEN |
|------|--|

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

| | |
|----------|--|
| OSHA PEL | Short-term value: 15 mg/m ³ |
| US ACGIH | Short-term value: 10 mg/m ³ |

112926-00-8 Precipitated silica (Silica-Amorphous)

| | |
|-----|---|
| PEL | 20mppcf or 80mg/m ³ /%SiO ₂ |
| REL | Long-term value: 6 mg/m ³ See Pocket Guide App. C |
| TLV | TLV withdrawn |

78-78-4 isopentane

| | |
|-----|--|
| PEL | Long-term value: 2950 mg/m ³ , 1000 ppm |
| TLV | Long-term value: 2950 mg/m ³ , 1000 ppm |

1333-86-4 Carbon black

| | |
|-----|--|
| PEL | Long-term value: 3.5 mg/m ³ |
| REL | Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C |
| TLV | Long-term value: 3* mg/m ³ *inhalable fraction |

- **Other Engineering Measures or Controls**

- Ventilation rates should be matched to conditions.

- If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

- **Personal Protective**

- **General Protective and Hygienic Measures**

- Avoid any contact with skin or eye.

- Do not eat, drink or smoke during work.

- Clean hands and exposed skin thoroughly after work and before breaks.

- **Personal Protective Equipment (PPE)**

- **Breathing Equipment**

- Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.

- Use a NIOSH approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

- **Hand Protection**

- Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.

- Nitrile Gloves

- Butyl Rubber Gloves

- **Eye Protection** safety glasses with side shields and or face shield.

- **Body Protection** Appropriate chemical resistant clothing.

- **Additional Information**

- All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work.

- The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

US

(Contd. on page 5)

Safety Data Sheet acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 4)

9 Physical and chemical properties

Information on Basic Physical and Chemical Properties

- **Appearance:**
 - **Form:** Paste
 - **Color:** Gray
 - **Odor:** Characteristic
- **Odor Threshold:** Not determined.

- **PH-Value:** Not determined.

- **Change in Condition:**
 - **Melting Point:** Not determined.
 - **Boiling Point:** Not determined.
 - **Flash Point:** >93 °C (>199 °F)
- **Decomposition Temperature:** Not determined.
- **Auto-ignition Temperature:** Not determined.
- **Flammability:** Not determined.
- **Explosion:** Not determined.
- **Explosion Limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.

- **Vapor Pressure:** Not determined.
- **Vapor Density:** not determined
- **Density at 20 °C (68 °F):** 0.54 g/cm³ (4.506 lbs/gal)
- **Solubility in or Miscibility with**
 - **Water:** Partially miscible.
- **Viscosity:**
 - **Dynamic:** Not determined.
 - **Kinematic:** Not determined.

- **Additional Information** No further relevant information.

10 Stability and reactivity

- **Physical Hazard(s)** Not a regulated reactive or physical hazard under GHS.
- **Hazardous Reactivity and Chemical Stability** Stable under normal conditions of use, storage and temperatures.
- **Thermal Decomposition and Conditions to be Avoided**
Keep away from incompatible material(s).
Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.
- **Possibility of Other Hazardous Reaction(s)**
May slowly corrode Copper, Aluminum, Nickel, Cobalt, Zinc and Galvanized surfaces.
May react with strong reducing agents generating flammable hydrogen (H₂).
- **Incompatible Material(s)**
Oxidizing agents
Sodium hypochlorite, Nitrous acid and other nitrosating agents
Acids
- **Hazardous Decomposition Product(s)**
Ammonia (NH₃) and/or Amines.
Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.

11 Toxicological information

- **Acute Toxicity**
 - **LD/LC50 values that are relevant for classification:**
If swallowed, may cause:
shock or collapse
Not a classified acute oral hazard.

68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine

| | | |
|--------|------|------------------------------|
| Oral | LD50 | (rat) (LD50 > 2000 mg/kg) |
| Dermal | LD50 | (rabbit) (LD50 ≥ 8550 mg/kg) |

13560-89-9 Bis(hexachlorocyclopentadieno)

| | | |
|------------|----------|--|
| Oral | LD50 | > 25000 mg/kg (rat) Reference: EPA HPVVIS (2011). |
| Dermal | LD50 | > 8000 mg/kg (rabbit) No mortality was observed; the substance was not classified as an acute oral hazard. Reference: EPA HPVVIS (2011). |
| Inhalative | LC50/4 h | > 2.25 mg/l (rat) No mortality or any adverse effects were observed; classification was not possible. Reference: ACToR (2011). |

65997-17-3 Fibrous Glass

| | | |
|------|------|--|
| Oral | LD50 | 2000-5000 mg/kg LD50 estimated to be between 2000-5000 mg/kg. Reference: Vendor SDS 2015 |
|------|------|--|

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 5)

| | | |
|---|----------|---|
| Dermal | LD50 | >5000 mg/kg LD50 estimated to be >5000 mg/kg Reference: Vendor SDS 2015 |
| Inhalative | LC50/4 h | (mouse) LD > 20 mg/kg Exposure time unknown. Reference: ChemID (2010). |
| 140-31-8 N-(2-Aminoethyl)piperazine | | |
| Oral | LD50 | 2140 mg/kg (rat) |
| Dermal | LD50 | 866 mg/kg (rabbit) |
| Inhalative | LC50/4 h | not classified mg/l (rat) (No mortality observed at saturated atmosphere) |
| 112-57-2 Tetraethylenepentamine | | |
| Oral | LD50 | 2100 mg/kg (white rats) (Classified as Cat 4 by EU) |
| Dermal | LD50 | 660 mg/kg (rabbit) |
| Inhalative | LC50/4 h | (Test species: n/a) Symptoms include mucosal irritations, cough, shortness of breath, inhalation may lead to formation of oedemas in the respiratory tract. Corrosive to respiratory system. |
| 67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica | | |
| Oral | LD50 | >5000 mg/kg (rat) (test method not specified) |
| Dermal | LD50 | (Test species: n/a) (Toxicity not expected based on acute oral data) |
| Inhalative | LC50/4 h | (Test species: n/a) (Toxicity not expected based on acute oral data) |
| 25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin | | |
| Oral | LD50 | 11400 mg/kg (rat) |
| Dermal | LD50 | 20000 mg/kg (rabbit) (Test guideline not available) |
| Inhalative | LC50/4 h | (Test species: n/a) (Toxicity not expected based on the acute oral data) |

- **Specific symptoms in biological assay:** Not a classified acute dermal hazard.

- **Primary irritant effect:**

While not a classified inhalative acute toxicity hazard, the product may cause the following symptoms:
burning sensation
sore throat

Not a classified acute inhalative hazard.
cough, headache, nausea, shortness of breath, vomiting, and wheezing

- **on the skin:** Strong caustic effect on the skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** Possible sensitization upon contact with skin.

- **Subacute to chronic toxicity:** Not applicable.

- **Experience with humans:** Not applicable.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

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

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine

EC50 | (No data available)

13560-89-9 Bis(hexachlorocyclopentadieno)

EC50 | (No data available)

65997-17-3 Fibrous Glass

EC50 | The substance in dust form causes skin irritation.
Reference: Haz-Map (2010).

140-31-8 N-(2-Aminoethyl)piperazine

EC50 | corrosive mg/kg (rabbit) (US DOT Corrosivity Assay)

112-57-2 Tetraethylenepentamine

EC50 | corrosive mg/kg (rabbit) (serious skin burns within 20-30 min of application)

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

EC50 | Non-irritating mg/kg (Test species: n/a) (Primary irritation index=0)

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

EC50 | irritating mg/kg (rabbit)

- **Persistence and degradability** No data available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No data available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:** The product is non-rapid degradable, and low or not highly bioaccumulative.

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 6)

Do not allow product to reach ground water, water course or sewage system.
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 Danger to drinking water if even small quantities leak into the ground.

• **Results of PBT and vPvB assessment**

- **PBT:** None of the ingredients is listed.
- **vPvB:** None of the ingredients is listed.

• **Other adverse effects** No further relevant information.

13 Disposal considerations

• **Waste treatment methods**

• **Recommendation:**

Generation of waste should be avoided or minimized wherever possible.
 Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.
 Dispose of contents/containers in accordance with local, regional, national, and international regulations.

• **Uncleaned packagings:**

• **Recommendation** Dispose of according to your local waste regulations.

14 Transport information

• **UN-Number**

• **DOT, ADR, ADN, IMDG, IATA** Not Regulated

• **UN Proper Shipping Name**

• **DOT, ADN, IMDG, IATA** Not Regulated

• **Transport hazard class(es)**

• **DOT, ADR, ADN, IMDG, IATA** Not Regulated
 • **Class**

• **Packing group**

• **DOT, ADR, IMDG, IATA** Not Regulated

• **Environmental Hazards:**

Not applicable.

• **Special Precautions:**

Not applicable.

• **Stowage Category**

NA

• **Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

15 Regulatory information

• **USA Regulation Lists**

• **SARA (Superfund Amendments and Reauthorization Act of 1986)**

• **Section 302 (Extremely Hazardous Substances)**

None of the ingredients is listed.

• **Section 313 (Toxics Release Inventory (TRI) reporting)**

None of the ingredients is listed.

• **Section 311/312 (Hazardous Chemical Inventory Reporting)**

| | | | |
|------------|---|------------------------------|---------|
| 65997-17-3 | Fibrous Glass | Acute Health, Chronic Health | 20-30% |
| 140-31-8 | N-(2-Aminoethyl)piperazine | A, C | 10-20% |
| 112-57-2 | Tetraethylenepentamine | A | 2.5-5% |
| 25068-38-6 | Bisphenol-A-(epichlorohydrin) epoxy resin | A, C | 1-<2.5% |
| 1333-86-4 | Carbon black | A, C | 0-<0.1% |

• **Hazard Abbreviations for SARA 311/312**

- A - Acute Health Hazard
- C - Chronic Health Hazard
- F - Fire Hazard
- R - Reactive Hazard
- S - Sudden Release of Pressure Hazard

• **TSCA (Toxic Substances Control Act)**

| | |
|------------|--|
| 68953-36-6 | Fatty acids, tall-oil, reaction products with tetraethylenepentamine |
| 13560-89-9 | Bis(hexachlorocyclopentadieno) |
| 65997-17-3 | Fibrous Glass |
| 140-31-8 | N-(2-Aminoethyl)piperazine |
| 112-57-2 | Tetraethylenepentamine |
| 67762-90-7 | Siloxanes and Silicones, di-Me, reaction products with silica |
| 25068-38-6 | Bisphenol-A-(epichlorohydrin) epoxy resin |
| 78-78-4 | isopentane |
| 1333-86-4 | Carbon black |

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 7)

· Proposition 65
· Chemicals Known to Cause Cancer

1333-86-4 Carbon black

· Chemicals Known to Cause Reproductive Toxicity for Females

None of the ingredients is listed.

· Chemicals Known to Cause Reproductive Toxicity for Males

None of the ingredients is listed.

· Chemicals Known to Cause Developmental Toxicity

None of the ingredients is listed.

· Carcinogenic Categories
· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

112926-00-8 Precipitated silica (Silica-Amorphous)

3

1333-86-4 Carbon black

2B

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value Established by ACGIH)

1333-86-4 Carbon black

A4

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

None of the ingredients is listed.

· International Regulation Lists
· Chinese Chemical Inventory of Existing Chemical Substances:

68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine

13560-89-9 Bis(hexachlorocyclopentadieno)

65997-17-3 Fibrous Glass

140-31-8 N-(2-Aminoethyl)piperazine

112-57-2 Tetraethylenepentamine

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

112926-00-8 Precipitated silica (Silica-Amorphous)

78-78-4 isopentane

1333-86-4 Carbon black

· Japanese Existing and New Chemical Substance List:

68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine

13560-89-9 Bis(hexachlorocyclopentadieno)

140-31-8 N-(2-Aminoethyl)piperazine

112-57-2 Tetraethylenepentamine

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

112926-00-8 Precipitated silica (Silica-Amorphous)

78-78-4 isopentane

1333-86-4 Carbon black

· Korean Existing Chemical Inventory:

68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine

13560-89-9 Bis(hexachlorocyclopentadieno)

65997-17-3 Fibrous Glass

140-31-8 N-(2-Aminoethyl)piperazine

112-57-2 Tetraethylenepentamine

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

112926-00-8 Precipitated silica (Silica-Amorphous)

78-78-4 isopentane

1333-86-4 Carbon black

· European Pre-registered substances:

68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine

13560-89-9 Bis(hexachlorocyclopentadieno)

65997-17-3 Fibrous Glass

140-31-8 N-(2-Aminoethyl)piperazine

112-57-2 Tetraethylenepentamine

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

112926-00-8 Precipitated silica (Silica-Amorphous)

78-78-4 isopentane

1333-86-4 Carbon black

· REACH - Substances of Very High Concern (SVHC) List:

None of the ingredients is listed.

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Print Date 03/15/2017

Revision Date 03/15/2017

Trade Name: EP1400 B

(Contd. of page 8)

Restriction of Hazardous Substances Directive (RoHS) list:

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department Issuing (M)SDS:** Product Safety Department
- **Contact:** msds@resinlab.com

Abbreviations and acronyms:

- ACGIH: American Conference of Governmental Industrial Hygienists
- ACToR: US EPA Aggregated Computational Toxicology Resource
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
- BCF: Bioconcentration Factor
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System
- CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform
- CLP/GHS: CLP (Classification, Labelling and Packaging of substances and mixtures) implements the Globally harmonised System (GHS) under Regulation (EC) No 1272/2008.
- DOT: US Department of Transportation
- DSL: Canada Domestic Substance List
- ESIS: European Chemical Substances Information System
- HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System
- HSDB: US NLM TOXNET Hazardous Substances Databank
- HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database
- IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)
- IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)
- ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)
- ICSC: International Chemical Safety Cards
- IMDG: International Maritime Dangerous Goods; the principal international rules for International Carriage of Dangerous Goods by SEA under the Recommendations on the Transport of Dangerous Goods by United Nations (RTDG)
- Koc: Partition coefficient, soil Organic Carbon to water
- LC50/LD50: Lethal Concentration/Dose, 50 percent
- N/a: Not available or Not applicable
- NFPA: US National Fire Protection Association
- NIOSH: US National Institute of Occupational Safety and Health
- NITE: National Institute of Technology and Evaluation, Japan
- OECD: Organisation for Economic Co-operation and Development
- OSHA: US Occupational Safety and Health Administration
- P: Marine Pollutant
- RCRA: Resource Conservation and Recovery Act (USA)
- REACH: EU Registry, Evaluation and Authorisation of Chemicals
- RID: the Regulations Concerning the International Carriage of Dangerous Goods by Rail; published by the Central Office for International Carriage by Rail (OTIF)
- RTDG: the Recommendations on the Transport of Dangerous Goods by United Nations (UN)
- RTECS: US Registry of Toxic Effects of Chemical Substances
- SARA: US Superfund Amendments and Reauthorization Act
- SIDS: OECD existing chemicals Screening Information Data Sets
- SVHC: EU ECHA Substance of Very High Concern
- TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)
- TOXLINE: US NLM bibliographic database search system
- TSCA: US Toxic Substance Control Act
- **Date of preparation / last revision** 03/15/2017 / -