

Safety Data Sheet

acc. to OSHA HCS

Print Date 04/28/2015

Revision Date 04/28/2015

Product Identifier

- **Trade Name:** EP1320LV Black
- **Application of the Substance or Mixture:** Epoxy Resin

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: 01-703-527-3887 (24 hours)

2 Hazard(s) identification

Hazard Classification


GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2A	H319 Causes serious eye irritation.
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)


GHS07 GHS09

- **Signal Word** Warning

Hazard-determining Component(s)

 Bisphenol-A-(epichlorohydrin) epoxy resin
 Diglycidyl ether of neopentyl glycol

Hazard statements

 Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Toxic to aquatic life with long lasting effects.

Precautionary statements

 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves.
 Wear eye protection / face protection.
 Avoid release to the environment.
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see on this label).
 Wash contaminated clothing before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.

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If eye irritation persists: Get medical advice/attention.
 If on skin: Wash with plenty of water.
 Collect spillage.
 Take off contaminated clothing and wash it before reuse.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection.
 Avoid release to the environment.
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

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)

Other hazards
Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical Characterization: Mixtures
Composition/Information on Ingredients

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	50-60%
CAS: 14807-96-6 EINECS: 238-877-9 RTECS: WW2710000	Talc	10-20%
	Epoxy Polyamine Adduct	10-20%
CAS: 17557-23-2 EINECS: 241-536-7 Index Number: 603-094-00-7 RTECS: TX3760000	Diglycidyl ether of neopentyl glycol  Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335  Eye Dam. 2B, H320	5-<10%

Classification System:

The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

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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. Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.

After Skin Contact

Remove all contaminated clothing and wash before reuse.
Wash contaminated skin with water and soap and rinse thoroughly.
Seek medical treatment in case of complaints.

After Eye Contact

Immediately bathe eyes for 15 minutes under running water.
Immediately remove contact lenses if present. Continue rinsing.
Seek immediate 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.
Seek medical treatment in case of complaints.

After Exposure Seek medical treatment in case of complaints.

Information for Doctor Have chemical containers, labels and/or (M)SDS ready when calling or visiting a medical center.

Indication of any Immediate Medical Attention and Special Treatment Needed

After frequent or high intense exposure, the following medical tests are recommended:

eye tests
skin tests

Check section 11 Toxicological Information for further relevant information.

Additional Information

For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

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.

Unsuitable Extinguishing Agent(s) Water with full jet

Firefighting Procedures

Isolate fire and deny unnecessary entry.
Immediately withdraw all personnel from the area in case of rising sound from venting safety device.
Eliminate all ignition sources if safe to do so.
Do not extinguish fire unless flow can be stopped.
Fight fire remotely due to the risk of explosion.
Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.
Contain fire water runoff if possible to prevent environmental pollution.

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Fight fire from protected location or safe distance.
Contain fire water runoff if possible to prevent environmental pollution.

Special Hazards Arising in Fire

Will not burn unless preheated.

In case of fire, following can be released:

Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires.

Nitrogen oxides

May generate ammonia gas.

Phenolic compounds

Magnesium oxide (MgO)

Carbon dioxide (CO₂) and Carbon monoxide (CO)

Silicon oxide (SiO₂)

Metal or metal oxide dust

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 Be Caution! Finely dispersed substance may form explosive mixtures in air.

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

Keep away from sewage system or other water courses; do not penetrate ground/soil.

Inform respective authorities in case of any seepage to the environment.

Cleaning Up Methods

Ensure adequate ventilation.

Eliminate all ignition sources.

Keep unauthorized personnel away.

For large spills:

Shut off source of leak if safe to do so.

Dike and contain.

Remove with vacuum trucks or pump to storage/salvage vessels.

Absorb residues with liquid-binding materials.

Avoid confined spaces, such as sewers, because of the possibility of an explosion.

For small spills:

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.

Additional Information No further relevant information.

7 Handling and storage

Handling

Precautions for Safe Handling

Obtain special instruction before use; do not handle until all safety precautions have been read and understood.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Keep away from incompatible material(s).

Avoid any release into the environment.

Observe all the personal protection requirements in Section 8.

Information about Protection Against Explosions and Fires

Will not burn unless preheated.

Keep away from heat, sparks, open flame and other ignition sources during handling.

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Dust can combine with air to form an explosive mixture.

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.

Information about Storage in One Common Storage Facility

Store away from incompatible material(s).
Store away from foodstuffs.
Avoid release to the environment.
Store away from direct sunlight.

Additional Information No further relevant information.

8 Exposure controls/personal protection

Engineering Measures or Controls

Exposure Limit Values that Require Monitoring at the Workplace

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

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

14808-60-7 Quartz

PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable 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 eye.
Do not eat, drink or smoke during work.
Keep food, drink or feed away from working area.
Contaminated work clothing is not allowed out of workplace.
Clean hands and exposed skin thoroughly after work and before breaks.

Personal Protective Equipment (PPE)

Breathing Equipment

Caution! Improper use of respirators is dangerous.
In case of brief exposure or low pollution, use a respiratory filter device.
In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.

Hand Protection



Protective gloves

Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.
Suggested glove type(s):

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- Nitrile Gloves
- Butyl Rubber Gloves
- **Eye Protection**



Tightly sealed goggles

- **Body Protection** No relevant information.

· **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.

9 Physical and chemical properties

· **Information on Basic Physical and Chemical Properties**

· **Appearance:**

- **Form:** Liquid
- **Color:** Black
- **Odor:** Mild epoxy odor
- **Odor Threshold:** Not determined.

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

· **Change in Condition:**

- **Melting Point:** Not determined.
- **Boiling Point:** >217 °C (>423 °F)
- **Flash Point:** > 93 °C (> 199 °F)
- **Decomposition Temperature:** Not determined.
- **Flammability:** Not determined.
- **Explosion:** Not determined.
- **Explosion Limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.

- **Vapor Pressure:** Not determined.
- **Density at 25 °C (77 °F):** 1.3 g/cm³ (10.849 lbs/gal)
- **Solubility in or Miscibility with**
 - **Water:** Not miscible or difficult to mix.
- **Viscosity:**
 - **Dynamic at 20 °C (68 °F):** 40000 mPas
 - **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).

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Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.

· **Possibility of Other Hazardous Reaction(s)** No further relevant information available.

· **Incompatible Material(s)**

Mercaptans

Amines.

Oxidizing agents

Acids

Bases (Alkalis)

· **Hazardous Decomposition Product(s)**

Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.

· **Hazardous Polymerization Product(s)** No relevant information.

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

11 Toxicological information

For detailed Toxicological Information please email the Product Safety Department.

· **Acute Toxicity**

· **Oral**

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

Oral	LD50	11400 mg/kg (rat) 15600 mg/kg (mouse) Reference: NLM Toxnet (2010).
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14807-96-6 Talc

Oral	LD50	(No data available)
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Epoxy Polyamine Adduct

Oral	LD50	(No data available)
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17557-23-2 Diglycidyl ether of neopentyl glycol

Oral	LD50	4500 mg/kg (rat) Reference: ChemID (2010) and Momentive (M)SDS (2011).
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· **Potential Health Effect(s):** Not a classified acute oral hazard.

· **Dermal**

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

Dermal	LD50	20000 mg/kg (rabbit) (Test guideline not available) > 1270 mg/kg (mouse) > 2000 mg/kg (rat) > 1600 mg/kg (rabbit); however, there was no fixed test result available; classification was not possible without further information. Reference: Royce (M)SDS (2011) and ChemID (2010).
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14807-96-6 Talc

Dermal	LD50	(Test species: n/a) (No adverse effects known) Reference: IUCLID Dataset (2000).
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Epoxy Polyamine Adduct

Dermal	LD50	(No data available)
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17557-23-2 Diglycidyl ether of neopentyl glycol

Dermal	LD50	(rat) > 2000 mg/kg; end value or test detail was not available; classification was not possible. Reference: Momentive (M)SDS (2011).
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· **Potential Health Effect(s):** Not a classified acute dermal hazard.

· **Inhalative**

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

Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on the acute oral data)
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Inhalative LC50/4 h (No data available) (Toxicity not anticipated under normal conditions)

Epoxy Polyamine Adduct

Inhalative LC50/4 h (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Inhalative LC50/4 h (No data available)

Potential Health Effect(s):

cough
sore throat
Not a classified acute inhalative hazard.
No further relevant information; classification is not possible.

Skin Corrosion or Irritation

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

Corrosion/Irritation irritating (rabbit)
Acute skin irritation was mild, through repeated and prolonged exposure may cause severe irritation.
The substance was classified as Category 2 by GHS-J.
Reference: HSNO CCID (2010) and GHS-J (2006).

14807-96-6 Talc

Corrosion/Irritation not irritating (Human)
There was no or very slight irritation observed in humans.
(rabbit)
Primary cutaneous irritation tests showed no trace of irritation in rabbits.
The substance was not classified as a dermal irritant.
Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Corrosion/Irritation (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Corrosion/Irritation irritating (rabbit) (No test detail available)
Based on manufacturer's (M)SDS, the substance was considered to be moderately irritating to rabbit skin.
Based on NIOSH ICSC, the substance irritated eyes and skin.
Reference: Momentive (M)SDS (2011) and NIOSH ICSC (2010).

Potential Health Effect(s):

Causes skin irritation.
In contact with skin, may cause:
redness and pain

Eye Serious Damage or Irritation

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

Damage/Irritation irritating (rabbit)
The substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin.

14807-96-6 Talc

Damage/Irritation mildly irritat. (rabbit)
Slight irritation was observed after instilling the substance into conjunctival bags of rabbit eyes; the substance was classified as a mild eye irritant (Category 2B).
Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Damage/Irritation (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Damage/Irritation slightly (rabbit) (No test detail available)
Based on manufacturer's MSDS, the substance was considered to be slightly irritating to rabbit eyes.
Based on NIOSH ICSC, the substance irritated eyes and skin.
Reference: Momentive (M)SDS (2011) and NIOSH ICSC.

Potential Health Effect(s):

Causes serious eye irritation.
In contact with eye, may cause:
redness and pain

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Respiratory or Skin Sensitization

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

Sensitization	Skin	sensitizing (Human) Based on positive results from skin sensitization tests on human volunteers and guinea pigs, GHS-J classified the substance as a dermal sensitizer. Reference: GHS-J (2006).
	Respiratory	(No data available)

14807-96-6 Talc

Sensitization	Skin	not sensitizing (Human) There were no sensitization effects in workers that were repeatedly exposed to the substance powder for many years. Reference: IUCLID Dataset (2000).
	Respiratory	(No data available)

Epoxy Polyamine Adduct

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Sensitization	Skin	sensitizing (Test species: n/a) The substance was classified as a contact sensitizer. Reference: ERMA HSNO (2010), Momentive (M)SDS (2011) and NIOSH ICSC (2010).
	Respiratory	(No data available)

Potential Health Effect(s):

May cause an allergic skin reaction.

No relevant information for respiratory sensitization; classification is not possible.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Germ Cell Mutagenicity

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

Mutagenicity	positive (Chinese hamster lung fibroblast cells) (In Vitro (Chromosomal Aberration)) In Vitro (Chromosomal Aberration; Chinese hamster lung fibroblast cells) - Positive without metabolic activation; negative with metabolic activation. Positive (salmonella typhimurium) (In Vitro (Ames assay)). Due to the absence from In Vivo tests, it was not possible to make a conclusion of mutagenicity of the substance. Reference: NLM CCRIS (2010).

14807-96-6 Talc

Mutagenicity	negative (salmonella typhimurium) (In Vitro (Ames tests)) In Vitro (Ames tests in S. Typhimurium) - negative with and without metabolic activation. In Vitro (DNA damage and repair assay in rat pleural mesothelial cells) - negative In Vitro (Chromosomal aberrations in human W138 cells) - negative negative (rat) (In Vivo (chromosomal aberration&dominant lethal)) In Vivo (chromosomal aberration and dominant lethal mutations; rat; oral administration of 30 - 5000 mg/kg bw) - negative; the substance did not induce any mutagenic effects in rats. Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Mutagenicity	(No data available)
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17557-23-2 Diglycidyl ether of neopentyl glycol

Mutagenicity	(salmonella typhimurium) In Vitro (Ames tests with salmonella typhimurium; strains: TA100 and TA1535) - Positive with and without metabolic activation. Due to the absence of In Vivo test results, the substance can't be classified as a germ cell mutagen. Reference: NLM TOXNET CCRIS (2010).

Potential Health Effect(s): No further relevant information; classification is not possible.

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Carcinogenicity

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

Carcinogenicity *negative (Test species: n/a) (Not listed by ACGIH, IARC, NTP, or OSHA) (Mouse)*
1 out of 4 cases with female mice showed positive carcinogenic results after a repeated dermal application with 10% concentration of the substance for two years. When considering all of the evidence, the substance was not classified as a carcinogen.
Reference: Dow (M)SDS (2010).

14807-96-6 Talc

Carcinogenicity *negative (Human)*
The substance has been used as medication for pleural effusions and pneumothorax for over 60 years, and did not show an increased incidence of lung cancer, or any cases of mesothelioma in 210 patients. Thus, the substance was not expected to have a carcinogenic potential for humans.
Reference: IUCLID Dataset (2000).
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrous magnesium silicate)
3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrous magnesium silicate)
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Epoxy Polyamine Adduct

Carcinogenicity (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Carcinogenicity *negative (Test species: n/a)*
Not listed as a carcinogen by IARC.

Potential Health Effect(s): Not a known Carcinogen.

Reproductive Toxicity

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

Reproductive Toxi. *negative (Test species: n/a) (no reproductive or developmental effect observed)*
There was no reproductive or developmental effect observed at dosing levels that were toxic to parental animals.
Reference: GHS-J (2006).

14807-96-6 Talc

Reproductive Toxi. *negative (Test species listed below) (No effect found in hamsters, rats, mice or rabbits)*
There were no teratological effects observed in hamsters, rats, mice or rabbits following a repeated oral administration with up to 1600 mg/kg/day of the substance.
Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Reproductive Toxi. (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Reproductive Toxi. (No data available)

Potential Health Effect(s): Not a known Reproductive hazard.

Specific Target Organ Toxicity - Single Exposure

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

STOT-Single *Target: None (Rats and Mice) (No effect after single oral doses)*
Somnolence (general depressed activity) and dyspnea were observed after a single oral application with 11400 mg/kg to rats, or 15600 mg/kg to mice of the substance. However, the dose levels were both outside of the guidance value ranges.
Reference: NLM Toxnet (2010).

14807-96-6 Talc

STOT-Single (No data available)

Epoxy Polyamine Adduct

STOT-Single (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

STOT-Single (No data available)

Potential Health Effect(s): Not a known hazard to organs upon single exposure.

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Specific Target Organ Toxicity - Repeated Exposure

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

STOT-Repeated Target: N/A (guinea pig) (insufficient data for classification)
 With dermal application of the substance for 55 days, increased seromuroid concentrations, decreased lactate-dehydrogenase (LDH), and decreased leucyl-naphthylamidase (LNA) were observed in the test animals. Meanwhile, the substance caused a toxic effect on blood components of female guinea-pigs with greater effects on pregnant animals. However, there was no detail available regarding the dose level or test guideline, classification was thus not possible.
 Reference: HSNO CCID (2010).

14807-96-6 Talc

STOT-Repeated (rat) (Target organs: None)
 No significant depression of mean lifespan was observed after a repeated oral application of 100 mg/day for 101 days to rats.
 Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

STOT-Repeated (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

STOT-Repeated (No data available)

Potential Health Effect(s): No further relevant information; classification is not possible.

Aspiration Hazard

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

Aspiration Hazard (No data available)

14807-96-6 Talc

Aspiration Hazard (No data available)

Epoxy Polyamine Adduct

Aspiration Hazard (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Aspiration Hazard (No data available)

Potential Health Effect(s): No relevant information; classification is not possible.

Additional Information No further relevant information.

12 Ecological information

Aquatic Environmental Toxicity

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

Algae Toxicity (No data available)
 Crustacean Toxicity 1.4 - 1.7 mg/l (Daphnia magna (water flea)) (EC50 (48 hrs))
 Fish Toxicity 1.41 mg/l (Oryzias latipes (Rice fish)) (LC50 (96 hrs))
 3.1 mg/l (Pimephales promelas (fathead minnow)) (LC50 (96 hrs))
 Based on the non-rapid degradability and the acute LC50 < 10 mg/L, the substance is classified as a Chronic-2 environmental hazard.
 Reference: Dow (M)SDS (2010) and CHRIP (2010).

14807-96-6 Talc

Algae Toxicity (No data available)
 Crustacean Toxicity (No data available)
 Fish Toxicity > 100000 mg/l (Brachydanio rerio (Zebra fish)) (LC50 (24 hrs), NFT90.303)
 The substance was classified as non-hazardous to aquatic environment.
 Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Algae Toxicity (No data available)
 Crustacean Toxicity (No data available)
 Fish Toxicity (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Algae Toxicity (No data available)

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Crustacean Toxicity (No data available)

Fish Toxicity (No data available)

Aquatic Environmental Toxicity Assessment: Toxic to aquatic life with long lasting effects.

Degradability and Stability

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

Biodegradation non-biodegrad. (Test species: n/a) (Biodegradation (OECD TG 302B; 28 days) = 12% (Activated Sludge) (OECD TG 301C; 4 weeks; Conc. 100 mg/L)
Biodegradation (Indirect Analysis from BOD) = 0%
Biodegradation (Direct Analysis from HPLC) = 0%
The substance is non-biodegradable.
Reference: Dow (M)SDS (2010) and CHRIP (2010).

Persistence (Test species: n/a) (This substance is persistent)
Reference: Canada DSL (2007) and CHRIP (2010).

Photodegradation 6.69E-11 cm³/molecule-sec (OH radical) (Half-life (T1/2) = 1.92 hrs)
However, photolysis in water is negligible.
Reference: Dow (M)SDS (2010).

Stability in water (No data available)

14807-96-6 Talc

Biodegradation (Test species: n/a) (biodegradation of the substance is not expected)
As an inorganic metal compound, biodegradation of the substance is not expected.

Persistence persistent (Test species: n/a)
The substance is persistent.
Reference: Canada DSL (2007).

Photodegradation (Test species: n/a) (photodegradation of the substance is not expected)
As an inorganic metal compound, photodegradation of the substance is not expected.

Stability in water stable (Test species: n/a)
The substance is expected to be hydrolytically stable in water.
Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Biodegradation (No data available)

Persistence (No data available)

Photodegradation (No data available)

Stability in water (No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

Biodegradation (No data available)

Persistence (Test species: n/a)
This substance is not persistent.
Reference: Canada DSL (2007).

Photodegradation (No data available)

Stability in water (No data available)

Bioaccumulation and Distribution

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

BCF 0.56-42 (Cyprinus carpio) (The substance is low-bioaccumulative)
BCF (28 days; Concentration: 10 µg/L) = 0.56 - 0.67, 3.3 - 4.2
BCF (28 days; Concentration: 1 µg/L) = 5.6 - 6.8, 33 - 42
Reference: CHRIP (2010).

Koc 1800 - 4400 L/kg (soil)
Potential for mobility in soil is moderate.
Reference: Dow (M)SDS (2010).

LogPow 3.7 - 3.9 (Test species: n/a)
Reference: Dow (M)SDS (2010).

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14807-96-6 Talc

BCF	(Test species: n/a) (The substance is not bioaccumulative) Reference: Canada DSL (2007).
Koc	(No data available) As a natural component of soil when present, the substance has a strong potential to be absorbed to soil, sediment or sludge. The Koc value is expected be very low. Reference: IUCLID Dataset (2000).
LogPow	(Test species: n/a) (test of LogPow is not applicable) As an insoluble inorganic metal compound, test of LogPow is not applicable. Reference: IUCLID Dataset (2000).

Epoxy Polyamine Adduct

Koc	(No data available)
LogPow	(No data available)

17557-23-2 Diglycidyl ether of neopentyl glycol

BCF	(Test species: n/a) The substance is not bioaccumulative. Reference: Canada DSL (2007).
Koc	(No data available)
LogPow	0.23 (Test species: n/a) Reference: CHRIP (2011).

Degradability and Bioaccumulation Assessment: Non-rapidly degradable, and low bioaccumulative.

Additional Information No further relevant information.

13 Disposal considerations

Hazardous Waste List

Description: It may be necessary to contain and dispose of the substance/mixture as a hazardous waste.

Waste Treatment 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.

Unused and Uncontaminated Packagings

Recommendation Dispose of according to your local waste regulations.

14 Transport information

UN-Number

DOT, ADR, IMDG, IATA UN3082

UN Proper Shipping Name

DOT, ADR, IMDG, IATA Environmentally hazardous substances, liquid, n.o.s. (Bisphenol-A-epichlorohydrin) epoxy resin)

Transport hazard class(es)

DOT, IMDG, IATA



Class

9 Miscellaneous dangerous substances and articles

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Label	9
ADR	
	
Class	9 (M6) Miscellaneous dangerous substances and articles
Label	9
Packing group	
DOT, ADR, IMDG, IATA	III
Environmental Hazards:	
Marine Pollutant:	Yes Symbol (fish and tree)
Special Marking (ADR):	Symbol (fish and tree)
Special Marking (IATA):	Symbol (fish and tree)
Special Precautions:	
Danger Code (Kemler):	Warning: Miscellaneous dangerous substances and articles 90
EMS Number:	F-A,N/A
Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code	
	Not applicable.
Transport/Additional Information:	
DOT	
Quantity limitations	On passenger aircraft/rail: No limit On cargo aircraft only: No limit
Remarks:	Special marking with the symbol (fish and tree).
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Bisphenol-A-(epichlorohydrin) epoxy resin), 9, III

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.

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Section 311/312 (Hazardous Chemical Inventory Reporting)

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	A, C	50-60%
1333-86-4	Carbon black	A, C	0.1-<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)

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
14807-96-6	Talc
	Epoxy Polyamine Adduct
17557-23-2	Diglycidyl ether of neopentyl glycol
1333-86-4	Carbon black
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
14808-60-7	Quartz

Proposition 65

Chemicals Known to Cause Cancer

1333-86-4	Carbon black
14808-60-7	Quartz
106-89-8	1-chloro-2,3-epoxypropane

Chemicals Known to Cause Reproductive Toxicity for Females

None of the ingredients is listed.

Chemicals Known to Cause Reproductive Toxicity for Males

106-89-8	1-chloro-2,3-epoxypropane
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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)

14807-96-6	Talc	2B
14808-60-7	Quartz	1

NTP (National Toxicology Program)

14808-60-7	Quartz	K
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TLV (Threshold Limit Value Established by ACGIH)

14807-96-6	Talc	A4
1333-86-4	Carbon black	A4
14808-60-7	Quartz	A2

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

14808-60-7	Quartz
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International Regulation Lists

Canadian Domestic Substance Listings:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
14807-96-6	Talc
17557-23-2	Diglycidyl ether of neopentyl glycol
1333-86-4	Carbon black

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

14808-60-7 Quartz

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

Chinese Chemical Inventory of Existing Chemical Substances:

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

14807-96-6 Talc

17557-23-2 Diglycidyl ether of neopentyl glycol

1318-59-8 Chlorite group minerals

1333-86-4 Carbon black

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

14808-60-7 Quartz

Japanese Existing and New Chemical Substance List:

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

14807-96-6 Talc

17557-23-2 Diglycidyl ether of neopentyl glycol

1318-59-8 Chlorite group minerals

1333-86-4 Carbon black

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

14808-60-7 Quartz

Korean Existing Chemical Inventory:

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

14807-96-6 Talc

17557-23-2 Diglycidyl ether of neopentyl glycol

1318-59-8 Chlorite group minerals

1333-86-4 Carbon black

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

14808-60-7 Quartz

European Pre-registered substances:

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

14807-96-6 Talc

17557-23-2 Diglycidyl ether of neopentyl glycol

1318-59-8 Chlorite group minerals

1333-86-4 Carbon black

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

14808-60-7 Quartz

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

None of the ingredients is listed.

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

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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
ChemID (Full Record): US NLM Chemical Information Database (or its Full Record) designed to help search for information by chemical name or structure
CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform
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
IUCLID: EU REACH International Uniform Chemical Information Database
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
NLM TOXNET: US National Library of Medicine Toxicology Data Network
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
ECHA: European Chemicals Agency's Dissemination portal with information on chemical substances registered under REACH

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