

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 04/01/2020 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product name : EP1320LV Black

1.2. Recommended use and restrictions on use

Recommended use : One part heat cure epoxy
Restrictions on use : Product for industrial use only

1.3. Supplier

ResinLab, LLC

N109 W13300 Ellsworth Drive

Germantown, WI 53022 - United States

T 1-877-259-1669

msds@resinlab.com - www.resinlab.com

1.4. Emergency telephone number

Emergency number : CHEMTREC:1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2

Skin sensitisation, Category 1

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - If on skin: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

04/01/2020 EN (English) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Product identifier | % | GHS US classification |
|--------------------------------------|----------------------|-----------|---|
| Epoxy Resin | (CAS-No.) 25068-38-6 | 50 – 75 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |
| Talc | (CAS-No.) 14807-96-6 | 15-20 | Not classified |
| Diglycidyl ether of neopentyl gylcol | (CAS-No.) 17557-23-2 | 5 – 10 | Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 3, H402 |
| carbon black | (CAS-No.) 1333-86-4 | 0.1 – 0.5 | Not classified |

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

: Rinse mouth out with water. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact

: Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact

: Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media

: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

04/01/2020 EN (English) 2/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station, curing ovens must be ventilated to prevent emissions in the workplace. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures

: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Epoxy Resin (25068-38 | 3-6) | |
|-------------------------|--------------------------------|--|
| Not applicable | | |
| Diglycidyl ether of neo | pentyl gylcol (17557-23-2) | |
| Not applicable | | |
| carbon black (1333-86 | -4) | |
| ACGIH | Local name | Carbon black |
| ACGIH | ACGIH TWA (mg/m³) | 3 mg/m³ (Inhalable fraction) |
| ACGIH | Remark (ACGIH) | TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans) |
| ACGIH | Regulatory reference | ACGIH 2019 |
| OSHA | OSHA PEL (TWA) (mg/m³) | 3.5 mg/m³ |
| OSHA | Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| Talc (14807-96-6) | | |
| ACGIH | Local name | Talc |
| ACGIH | ACGIH TWA (mg/m³) | 2 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) |
| ACGIH | ACGIH TWA (ppm) | 0.1 fibers/cm³ (Containing asbestos fibers. F - Respirable fibers) |
| ACGIH | Remark (ACGIH) | Containing no asbestos fibers = TLV® Basis: Pulm fibrosis; pulm func. Notations: A4 Containing asbestos fibers = TLV® Basis: Pneumoconiosis; lung cancer; mesothelioma. Notations: A1 (Confirmed Human Carcinogen) |
| ACGIH | Regulatory reference | ACGIH 2019 |
| OSHA | OSHA PEL (TWA) (ppm) | 20 mppcf |
| OSHA | Remark (OSHA) | Table Z-3. CAS No. source: eCFR Table Z-1. |
| OSHA | Regulatory reference (US-OSHA) | OSHA Annotated Table Z-3 Mineral Dusts |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station, curing ovens must be ventilated to prevent

emissions in the workplace.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

04/01/2020 EN (English) 3/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Safety glasses with side shields

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Black

Odour : characteristic

Odour threshold : No data available

pH : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : $> 200 \,^{\circ}\text{C}$ Flash point : $> 93 \,^{\circ}\text{C}$

Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Not applicable.

Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Density : 1.27 g/cm³

Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available : No data available Auto-ignition temperature : No data available Decomposition temperature No data available Viscosity, dynamic **Explosive limits** : No data available Explosive properties : No data available Oxidising properties : No data available VOC content No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids. Bases (Alkalis). Oxidizing agent. Mercaptans. Amines.

04/01/2020 EN (English) 4/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.6. Hazardous decomposition products

Nitrogen oxides. Carbon oxides (CO, CO2). Phenolic compounds.

SECTION 11: Toxicological information

| 11. | 1 I | nformation | on toxico | Indica | effects |
|-----|-----|------------|------------|--------|-----------|
| | | momation | OII LOXICO | iogica | i ellecto |

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Epoxy Resin (25068-38-6) | |
|--|--|
| LD50 oral rat | > 2000 mg/kg (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s)) |
| Diglycidyl ether of neopentyl gylcol (| 17557-23-2) |
| LD50 oral rat | 4500 mg/kg (Rat, Literature study, Oral) |
| LD50 dermal rat | > 2100 mg/kg bodyweight (Rat, Literature study, Dermal) |
| ATE US (oral) | 4500 mg/kg bodyweight |
| carbon black (1333-86-4) | |
| LD50 oral rat | > 10000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 28 day(s)) |
| LC50 inhalation rat (mg/l) | > 4.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Experimental value, Inhalation (dust)) |
| Talc (14807-96-6) | |
| LD50 oral rat | > 5000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) |
| LC50 inhalation rat (mg/l) | > 2.1 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 15 day(s)) |
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. |

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause an allergic skin reaction in the serious eye irritation.

Germ cell mutagenicity : Not classified in the serious eye irritation.

Carcinogenicity : Not classified in the serious eye irritation.

| carbon black (1333-86-4) | |
|--------------------------|--|
| IARC group | 2B - Possibly carcinogenic to humans |
| Talc (14807-96-6) | |
| IARC group | 3 - Not classifiable, 2B - Possibly carcinogenic to humans |
| Poproductive toxicity | · Not classified |

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

SECTION 12: Ecological information

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

| Epoxy Resin (25068-38-6) | |
|--------------------------|---|
| LC50 fish 1 | 2.3 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static |
| | system, Fresh water, Experimental value, Nominal concentration) |

04/01/2020 EN (English) 5/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Epoxy Resin (25068-38-6) | |
|--|---|
| EC50 Daphnia 1 | 2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| Diglycidyl ether of neopentyl gylcol (17557-23 | -2) |
| LC50 fish 1 | > 100 mg/l (96 h, Pisces, QSAR) |
| EC50 Daphnia 1 | 39 – 57 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| carbon black (1333-86-4) | |
| LC50 fish 1 | > 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, Lethal) |
| EC50 Daphnia 1 | > 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) |
| ErC50 (algae) | > 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration) |
| Talc (14807-96-6) | |
| LC50 fish 1 | 89581 mg/l (ECOSAR v1.00, 96 h, Pisces, Fresh water, QSAR) |

12.2. Persistence and degradability

| Epoxy Resin (25068-38-6) | | |
|--|---|--|
| Persistence and degradability | Not readily biodegradable in water. | |
| Diglycidyl ether of neopentyl gylcol (17557-23 | i-2) | |
| Persistence and degradability | Readily biodegradable in water. | |
| carbon black (1333-86-4) | | |
| Persistence and degradability | Biodegradability in soil: not applicable. Biodegradability: not applicable. | |
| Chemical oxygen demand (COD) | Not applicable (inorganic) | |
| ThOD | Not applicable (inorganic) | |
| Talc (14807-96-6) | | |
| Persistence and degradability | Biodegradability: not applicable. | |
| Chemical oxygen demand (COD) | Not applicable | |
| ThOD | Not applicable | |
| BOD (% of ThOD) | Not applicable | |

12.3. Bioaccumulative potential

| Epoxy Resin (25068-38-6) | | |
|---|--|--|
| BCF other aquatic organisms 1 | 31 (Estimated value, Fresh weight) | |
| Partition coefficient n-octanol/water (Log Pow) | 3 (Estimated value, 25 °C) | |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). | |
| Diglycidyl ether of neopentyl gylcol (17557-23 | i-2) | |
| Partition coefficient n-octanol/water (Log Pow) | 0.47 (QSAR, KOWWIN, 20 °C) | |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). | |
| carbon black (1333-86-4) | | |
| Bioaccumulative potential | Not bioaccumulative. | |
| Talc (14807-96-6) | | |
| BCF other aquatic organisms 1 | 3.162 l/kg (BCFBAF v3.01, Fresh water, QSAR) | |
| Partition coefficient n-octanol/water (Log Pow) | -9.4 (QSAR, KOWWIN, 25 °C) | |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). | |

12.4. Mobility in soil

| Epoxy Resin (25068-38-6) | |
|---|---|
| Surface tension | 59 mN/m (20 °C, 0.09 g/l) |
| Partition coefficient n-octanol/water (Log Koc) | 2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR) |
| Ecology - soil | Low potential for adsorption in soil. |

04/01/2020 EN (English) 6/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Diglycidyl ether of neopentyl gylcol (17557-23-2) | | |
|---|--|--|
| Partition coefficient n-octanol/water (Log Koc) | 1.22 (log Koc, QSAR) | |
| Ecology - soil | Highly mobile in soil. | |
| carbon black (1333-86-4) | | |
| Surface tension | Not applicable (solid) | |
| Ecology - soil | No (test)data on mobility of the substance available. Not toxic to plants. Not toxic to animals. | |
| Talc (14807-96-6) | | |
| Ecology - soil | Adsorbs into the soil. | |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin),

9, III

UN-No. (IMDG) : 3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Epoxy Resin

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

Marine pollutant : Yes (IMDG only)



Air transport

Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin), 9, III

UN-No. (IATA) : 3082

Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.

Epoxy Resin

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

04/01/2020 EN (English) 7/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Epoxy Resin (25068-38-6) | | |
|---|---|--|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| EPA TSCA Regulatory Flag | XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711). | |
| Diglycidyl ether of neopentyl gylcol (17557-23-2) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| EPA TSCA Regulatory Flag | T - T - indicates a substance that is the subject of a final TSCA section 4 test rule. | |
| carbon black (1333-86-4) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| Talc (14807-96-6) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |

15.2. International regulations

CANADA

| CANADA | | |
|---|--|--|
| Epoxy Resin (25068-38-6) | | |
| Listed on the Canadian DSL (Domestic Substances List) | | |
| Diglycidyl ether of neopentyl gylcol (17557-23-2) | | |
| Listed on the Canadian DSL (Domestic Substances List) | | |
| carbon black (1333-86-4) | | |
| Listed on the Canadian DSL (Domestic Substances List) | | |
| Talc (14807-96-6) | | |
| Listed on the Canadian DSL (Domestic Substances List) | | |

EU-Regulations

Contains no substance on the REACH candidate list

National regulations

carbon black (1333-86-4)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations



This product can expose you to 1-chloro-2,3-epoxypropane, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Component | State or local regulations |
|-------------------------|--|
| carbon black(1333-86-4) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List |
| Talc(14807-96-6) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-statements:

| H315 | Causes skin irritation. |
|------|--|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H401 | Toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects. |

SDS US - ResinLab

04/01/2020 EN (English) 8/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

04/01/2020 EN (English) 9/9