

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Version: 3.0

Page: 1/9

(30535705/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Efka® PL 5382

Recommended use of the chemical and restriction on use

Recommended use*: plasticizers

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: epoxide, fatty acids
Synonyms: Epoxy Plasticizer

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20
Version: 3.0

Page: 2/9
(30535705/SDS_GEN_US/EN)

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Under the referenced regulation, this product does not contain any components classified for health hazards above the relevant cut off value.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Version: 3.0

Page: 3/9

(30535705/SDS_GEN_US/EN)

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Keep away from sources of ignition - No smoking.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Protect from temperatures below: 10 °C

Protect from temperatures above: 40 °C

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:

Ensure adequate ventilation.

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Version: 3.0

Page: 4/9

(30535705/SDS_GEN_US/EN)

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields. Wear face shield if splashing hazard exists.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

| | | |
|---|---|---|
| Form: | liquid | |
| Odour: | fatty-like | |
| Odour threshold: | Not determined due to potential health hazard by inhalation. | |
| Colour: | light yellow | |
| pH value: | not determined, of very low solubility | |
| Melting point: | -10 °C (1,013 hPa) Literature data. | (measured) |
| pour point: | -2 °C | (OECD Guideline 102) |
| decomposition point: | 203 °C (1,016 hPa) The substance / product decomposes. | (OECD Guideline 103) |
| Flash point: | 231 °C | |
| Flammability: | Study scientifically not justified. | |
| Lower explosion limit: | For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point. | |
| Upper explosion limit: | For liquids not relevant for classification and labelling. | |
| Autoignition: | Study scientifically not justified. | |
| Vapour pressure: | < 0.0000001 Pa (35 °C) | (Directive 92/69/EEC, A.4) (DIN 51757) |
| Density: | 0.993 g/cm ³ (20 °C) | |
| Relative density: | 0.993 (20 °C) | |
| Partitioning coefficient n-octanol/water (log Pow): | > 6.2 | (OECD Guideline 117) |
| Self-ignition temperature: | not self-igniting | |
| Thermal decomposition: | No decomposition if stored and handled as prescribed/indicated. | |
| Viscosity, dynamic: | 548 - 650 mPa.s (20 °C) | (OECD 114) |
| Solubility in water: | 0.02 µg/l (20 °C) | |
| Evaporation rate: | not determined | |

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Version: 3.0

Page: 5/9

(30535705/SDS_GEN_US/EN)

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

Conditions to avoid

None if used for intended purpose.

Incompatible materials

acids, bases

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50

Species: rat (male/female)

Value: > 5,000 mg/kg (similar to OECD guideline 401)

Inhalation

Study not necessary due to exposure considerations.

Dermal

Type of value: LD50

Species: rabbit (male)

Value: > 20 ml/kg

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Version: 3.0

Page: 6/9

(30535705/SDS_GEN_US/EN)

No mortality was observed.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the eyes. Not irritating to the skin.

Skin

Species: rabbit

Result: non-irritant

Eye

Species: rabbit

Result: non-irritant

Method: similar to OECD guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test

Species: guinea pig

Result: Non-sensitizing.

Method: similar to OECD guideline 406

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The information available on the product provides no indication of toxicity on target organs after repeated exposure. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity: Results from a number of long-term carcinogenicity studies are available. Taking into account all of the information, there is no indication that the substance itself is carcinogenic.

Reproductive toxicity

Assessment of reproduction toxicity: The information available on the product provides no indication of reproductive toxicity. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Symptoms of Exposure

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Page: 7/9

Version: 3.0

(30535705/SDS_GEN_US/EN)

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (48 h) 900 mg/l, *Leuciscus idus* (DIN 38412 Part 15)

The LC50 is higher than the solubility limit.

Aquatic invertebrates

EC50 (24 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)

Study not necessary due to exposure considerations.

Aquatic plants

EC50 (72 h) 8 mg/l (biomass), *Scenedesmus subspicatus* (DIN 38412 Part 8)

No observed effect concentration (72 h) 0.7 mg/l (biomass), *Desmodesmus subspicatus* (DIN 38412 Part 8)

Chronic toxicity to fish

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates

Study scientifically not justified.

Soil living organisms

Toxicity to soil dwelling organisms:

Study not necessary due to exposure considerations.

Toxicity to terrestrial plants

Study scientifically not justified.

Other terrestrial non-mammals

Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 activated sludge, domestic/EC50 (3 h): > 100 mg/l

DIN 38412 Part 27 (draft) bacterium/EC0 (30 min): > 1,000 mg/l

Persistence and degradability

Elimination information

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20
Version: 3.0

Page: 8/9
(30535705/SDS_GEN_US/EN)

78 % BOD of COD (28 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, predominantly domestic sewage) Readily biodegradable (according to OECD criteria).

79 - 92 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted) Readily biodegradable (according to OECD criteria).

Assessment of stability in water

Study technically not feasible.

Information on Stability in Water (Hydrolysis)

(OECD Guideline 111)

Study technically not feasible.

Photodegradation

No data available.

Bioaccumulative potential

Assessment bioaccumulation potential

Significant accumulation in organisms is not to be expected.

Bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

Significant accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is expected.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Safety Data Sheet

Efka® PL 5382

Revision date : 2019/06/20

Version: 3.0

Page: 9/9

(30535705/SDS_GEN_US/EN)

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2019/06/20

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