

Safety Data Sheet

Efka® PL 5646

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Version: 4.1

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(30650754/SDS_GEN_MX/EN)

1. Identification

Product identifier used on the label

Efka® PL 5646

Recommended use of the chemical and restriction on use

Recommended use*: Coating raw material for industrial applications
Recommended use*: for industrial use only

* 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 Mexicana S.A. de C.V.
Av. Insurgentes Sur 975
Col. CD. De Los Deportes,
C.P. 03710 Ciudad de México
MÉXICO

Telephone: +52 55 5325 2600

Emergency telephone number

SETIQ: 1800-00-214-(Rep. Mexicana) or 55-59-15-88 (CDMX)
Telephone: +1-800-849-5204 or +1-833-229-1000

Other means of identification

Chemical family: dicarboxylic acid esters

2. Hazards Identification

According to Regulation NOM-018-STPS-2015

Classification of the product

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

Label elements

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

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture. See section 12 - Results of PBT and vPvB assessment.

3. Composition / Information on Ingredients

According to Regulation NOM-018-STPS-2015

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 in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

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:

carbon dioxide, dry powder, water spray, foam

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Special hazards arising from the substance or mixture

Hazards during fire-fighting:

The product is combustible. Cool endangered containers with water-spray.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Chemical resistant protective gloves (EN 374), nitrile rubber (NBR) - 0.4 mm coating thickness, Manufacturer's directions for use should be observed because of great diversity of types., Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374);, Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the

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practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

| | | |
|---|--|--|
| Form: | liquid | |
| Odour: | almost odourless | |
| Odour threshold: | not determined | |
| Colour: | colourless | |
| pH value: | not applicable, of very low solubility | |
| pour point: | -54 °C | (DIN ISO 3016) |
| boiling temperature: | approx. 394 °C (1,013 hPa) Cannot be distilled without decomposition at normal pressure. | (Directive 92/69/EEC, A.2) |
| Flash point: | 224 °C When exposed to high temperatures over a long period of time, formation of outgassing flammable decomposition products may occur. | (Directive 92/69/EEC, A.9, closed cup) |
| Flammability: | hardly combustible | (derived from flash point) |
| Lower explosion limit: | (approx. 170 °C, approx. 1013 hPa) The lower explosion point of the substance/mixture has been determined. The explosion point describes the temperature of a flammable liquid at which the concentration of the saturated vapour mixed with air equals the lower explosion limit. | (DIN EN 15794, air) |
| Upper explosion limit: | As a consequence of the thermal decomposition behavior (see Thermal decomposition) it is not possible to determine the upper explosion limit according to standard DIN EN 1839. For liquids not relevant for classification and labelling. | |
| Autoignition: | 330 °C | (Directive 92/69/EEC, A.15) |
| Vapour pressure: | < 0.000001 hPa (20 °C) | (Directive 92/69/EEC, A.4) |
| Density: | 0.944 - 0.954 g/cm ³ (20 °C) | (DIN 51757) |
| Vapour density: | not determined | |
| Partitioning coefficient n- octanol/water (log Pow): | 10 (25 °C) | (Directive 92/69/EEC, A.8) |

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| Refractive index: | 1.4622 (20 °C) | (DIN 51423-2 (n2D20)) |
| Self-ignition temperature: | 20 °C not self-igniting | |
| Thermal decomposition: | When exposed to high temperatures over a long period of time, formation of outgassing flammable decomposition products may occur. | |
| Viscosity, dynamic: | 44 - 60 mPa.s (20 °C) | (calculated (from kinematic viscosity)) |
| | The value was determined by calculation from the detected kinematic viscosity. | |
| Particle size: | The substance / product is marketed or used in a non solid or granular form. | |
| Solubility in water: | < 0.02 mg/l (25 °C) | |
| Solubility (qualitative): | soluble | |
| | solvent(s): organic solvents, | |
| Molar mass: | 424.66 g/mol | |
| Evaporation rate: | Value can be approximated from Henry's Law Constant or vapor pressure. | |

10. Stability and Reactivity

Reactivity

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:

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

| | | |
|----------------------------------|----------|---|
| Formation of flammable gases: | Remarks: | Forms no flammable gases in the presence of water. |
|----------------------------------|----------|---|

Chemical stability

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

Possibility of hazardous reactions

Reacts with strong oxidizing agents.

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

Conditions to avoid

No special precautions other than good housekeeping of chemicals.

Incompatible materials

strong oxidizing agents

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

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When exposed to high temperatures over a long period of time, formation of outgassing flammable decomposition products may occur.

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

Value: > 5,000 mg/kg (OECD Guideline 423)

Dermal

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 402)

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: May cause slight irritation to the skin. Not irritating to the eyes.

Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

Eye

Species: rabbit

Result: non-irritant

Method: 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: OECD Guideline 406

Aspiration Hazard

not applicable

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Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Effects on the kidney of male rats were detected after repeated exposure. These effects are specific for the male rat and are known to be of no relevance to humans.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria, microorganisms and mammalian cell culture. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity: In long-term animal studies in which the substance was given in high concentrations by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction 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

(Further) symptoms and / or effects are not known so far

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 (96 h) > 100 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

Tested above maximum solubility. The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An eluate has been tested.

Aquatic plants

EC50 (72 h) > 100 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An eluate has been tested.

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

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No observed effect concentration (21 d) \geq 0.021 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. Limit concentration test only (LIMIT test).

Assessment of terrestrial toxicity

No toxic effects have been observed in studies with soil living organisms. No toxic effects have been observed in studies with terrestrial plants.

Soil living organisms

Toxicity to soil dwelling organisms:

LC50 (14 d) > 1,000 mg/kg, Eisenia foetida (OECD Guideline 207, artificial soil)

No observed effect concentration (56 d) > 1,000 mg/kg, Eisenia foetida (OECD Guideline 222, artificial soil)

EC10 (28 d) > 1,000 mg/kg, soil dwelling microorganisms (OECD 217, natural soil)

EC10 (28 d) 447 mg/kg, soil dwelling microorganisms (OECD 216, natural soil)

Toxicity to terrestrial plants

No observed effect concentration (20 d) > 1.000 mg/kg, Avena sativa (OECD Guideline 208)

No observed effect concentration (21 d) > 1.000 mg/kg, Brassica napus (OECD Guideline 208)

No observed effect concentration (21 d) > 1.000 mg/kg, Vicia sativa (OECD Guideline 208)

Other terrestrial non-mammals

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN EN ISO 8192-OECD 209-88/302/EEC, P. C aquatic

aerobic bacteria from a domestic water treatment plant/EC20 (180 min): > 1,000 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Biodegradable.

Not readily biodegradable (by OECD criteria).

Elimination information

90 - 100 % CO₂ formation relative to the theoretical value (60 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

70 - 80 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, adapted)

Assessment of stability in water

No data available.

Information on Stability in Water (Hydrolysis)

No data available.

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Bioaccumulative potential

Assessment bioaccumulation potential

Accumulation in organisms is not to be expected.

Bioaccumulation potential

Bioconcentration factor: 189 (30 d), Brachydanio rerio (OECD Guideline 305 E)

Mobility in soil

Assessment transport between environmental compartments

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Additional information

Other ecotoxicological advice:

Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

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

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Not applicable

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NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Skin Corr./Irrit. 3 Skin corrosion/irritation

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2019/11/22

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This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

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