

# Safety data sheet

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Version: 1.0

BASF Company Ltd. Safety data sheet

Date / Revised: 23.09.2020 Product: **Efka® FA 4608 AN** 

This MSDS is prepared pursuant to the provision of Article 110 of the Industrial Safety and Health Law.

(30605048/SDS\_GEN\_KR/EN)

Date of print 06.11.2023

# 1. Substance/preparation and company identification

# Efka® FA 4608 AN

Use: Raw material for coatings for industrial or professional use, additives for inks, varnishes or coatings, dispersing agent

### Manufacturer/supplier:

BASF Company Ltd. 14-16F. KCCI Bldg., 39, Sejong-daero, Jung-gu, Seoul REPUBLIC OF KOREA 04513

Telephone: +82 2 3707-3100 / -7500 (Prod.Inq.)

Telefax number: +82 2 3707-3122

E-mail address: Chemregulation-KR@basf.com

# Emergency information:

Local emergency number:

Telephone: 080 770 3100 (Accident Reception)

International emergency number: Telephone: +49 180 2273-112

## 2. Hazard identification

Classification of the substance and mixture:

Skin corrosion/irritation: Cat. 1

Serious eye damage/eye irritation: Cat. 1

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Skin sensitization: Cat. 1

Hazardous to the aquatic environment - chronic: Cat. 2

Label elements and precautionary statement:

Pictogram:



#### Signal Word: Danger

Hazard Statement:

H317 May cause an allergic skin reaction.

H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves, protective clothing and eye protection or face

protection.

P273 Avoid release to the environment. P260 Do not breathe dust or mist.

P272 Contaminated work clothing should not be allowed out of the workplace.

P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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

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

P310 Immediately call a POISON CENTER or physician.

P303 + P361 + P353 IF ON SKIN (or hair): Remove or Take off immediately all contaminated

clothing. Rinse skin with water or shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

Precautionary Statements (Storage): P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste

collection point.

Other hazards which do not result in classification:

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

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# 3. Composition/information on ingredients

#### **Chemical nature**

Preparation based on: additives

**Hazardous ingredients** 

Fatty acids, tall-oil, reaction products with diethylenetriamine

(Synonym name: No data available.) Content (W/W): >= 5 % - < 7 % CAS Number: 61790-69-0 KE number: KE-32788

The remainder of components is confidential business information.

### 4. First-Aid Measures

#### General advice:

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). First aid personnel should pay attention to their own safety.

#### If inhaled:

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

#### On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

# On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

# On ingestion:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting unless told to by a poison control center or doctor.

Most important symptoms/effects, acute and delayed:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Indication of immediate medical attention and notes for physician:

Hazards: No data available.

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

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# 5. Fire-Fighting Measures

Suitable (and inappropriate) extinguishing media:

Suitable extinguishing media:

water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:

water jet

Specific hazards:

harmful vapours

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

Special protective equipment:

Wear a self-contained breathing apparatus.

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:

Use personal protective clothing. Breathing protection required.

Environmental precautions:

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For large amounts: Pump off product.

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

# 7. Handling and Storage

Precautions for safe handling:

Handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Take precautionary measures against static discharges.

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Conditions for safe storage, including any incompatibilities:

Storage

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

# 8. Exposure controls and personal protection

Exposure limits, biological limit values etc.:

Components with occupational exposure limits:

No occupational exposure limits known.

**Biological Limit:** 

No data available.

**Engineering Controls:** 

Use adequate exhaust ventilation to keep airborne concentration below exposure limits.

Personal protective equipment:

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN 374)

butyl rubber (butyl) - 0.7 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

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 practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

### Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

#### Body protection:

Body protection must be chosen based on level of activity and exposure., acid- resp. lye-proof apron, e.g. of rubber (f.e. according to EN 14605), protection boots, f.e. of rubber (e.g. according to EN 20346), chemical-protection suit (f.e. according to EN 14605)

#### General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. No data available.

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# 9. Physical and Chemical Properties

Form: liquid
Colour: brownish
Odour: product specific
Odour threshold: No data available.

pH value:

not applicable

:

No data available.

boiling temperature: 201 °C

(1,013 hPa)

Flash point: 246 °C

Evaporation rate:

No data available.

Flammability (solid/gas): not flammable

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.

Ignition temperature:

No data available.

Thermal decomposition: No data available. Self ignition: not self-igniting

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Vapour pressure:

No data available.

Density: 0.954 g/cm3

(20 °C)

Relative density: 0.954

(20 °C)

Relative vapour density (air):

No data available.

Solubility in water: not soluble
Hygroscopy: Non-hygroscopic
Partitioning coefficient n-octanol/water (log Pow):
not applicable for mixtures

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Surface tension:

No data available.

Viscosity, dynamic: 153 mPa.s

(20 °C)

Viscosity, kinematic:

No data available.

Molar mass: No data available.

# 10. Stability and Reactivity

Chemical stability: please refer to section 7

Conditions to avoid:

See SDS section 7 - Handling and storage.

Substances to avoid:

strong oxidizing agents, strong bases, strong acids

Hazardous reactions:

No hazardous reactions when stored and handled according to instructions.

Hazardous decomposition products:

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

# 11. Toxicological Information

Delayed and immediate effects and also chronic effects from short and long term exposure:

# **Acute toxicity**

Acute toxicity (including STOT (single exposure)):

LD50 rat (oral): > 5,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

Acute toxicity (including STOT (single exposure)):

LC50 rat (by inhalation): > 20 mg/l 4 h

Determined for vapor The product has not been tested. The statement has been derived from the properties of the individual components.

Acute toxicity (including STOT (single exposure)):

LD50 rabbit (dermal): > 5,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

### **Irritation**

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Skin corrosion/irritation rabbit: Corrosive.

The product has not been tested. The statement has been derived from the properties of the individual components.

Serious eye damage/irritation rabbit: irreversible damage

The product has not been tested. The statement has been derived from the properties of the individual components.

## Respiratory/Skin sensitization

other other: skin sensitizing

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## Repeated dose toxicity (including STOT repeated exposure)

Assessment of repeated dose toxicity:

The information available on the product provides no indication of toxicity on target organs after repeated exposure.

#### **Aspiration hazard:**

No aspiration hazard expected.

### Germ cell mutagenicity

Assessment of mutagenicity:

Based on the ingredients, there is no suspicion of a mutagenic effect.

### Carcinogenicity

Assessment of carcinogenicity:

No data available.

### Reproductive toxicity

Assessment of reproduction toxicity:

Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

### **Developmental toxicity**

Assessment of teratogenicity:

Based on the ingredients, there is no suspicion of a teratogenic effect.

# Specific target organ systemic toxicity (single exposure):

Remarks: No data available.

### Specific target organ systemic toxicity (repeated exposure):

please refer to Repeated dose toxicity

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Numerical measures of toxicity (such as acute toxicity estimates)

# 12. Ecological Information

# **Ecotoxicity**

Assessment of aquatic toxicity:

No data available.

Toxicity to fish:

LC50 (96 h) > 1 - 10 mg/l, Fish

The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic invertebrates:

EC50 (48 h) > 1 - 10 mg/l, Daphnia magna

The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic plants:

EC50 (72 h) > 1 - 10 mg/l, algae

The product has not been tested. The statement has been derived from the properties of the individual components.

Microorganisms/Effect on activated sludge:

EC50 (0.5 h) > 1 - 10 mg/l, bacteria

The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic toxicity to fish:

No data available.

Chronic toxicity to aquatic invertebrates:

No data available.

Assessment of terrestrial toxicity:

No data available concerning terrestrial toxicity.

# **Mobility**

Assessment transport between environmental compartments:

No data available.

### Persistence and degradability

Assessment biodegradation and elimination (H2O):

Product is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

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# **Bioaccumulation potential**

Assessment bioaccumulation potential:

The product has not been tested.

Bioaccumulation potential:

No data available.

#### **Additional information**

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control.

# 13. Disposal Considerations

Disposal method:

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Disposal consideration:

All waste produced at Site must be treated by authorized waste treatment company.

Should be disposed in compliance with national and local regulations

# 14. Transport Information

**Domestic transport:** 

Hazard class: 8 Packing group: II

ID number: UN 1760 Hazard label: 8, EHSM

Proper shipping name: CORROSIVE LIQUID, N.O.S. (contains FATTY ACIDS, TALL-OIL,

REACTION PRODUCTS WITH DIETHYLENETRIAMINE)

Sea transport

**IMDG** 

Hazard class: 8 Packing group: II

ID number: UN 1760 Hazard label: 8, EHSM

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Marine pollutant: YES

Proper shipping name: CORROSIVE LIQUID, N.O.S. (contains FATTY ACIDS, TALL-OIL,

REACTION PRODUCTS WITH DIETHYLENETRIAMINE)

Air transport

IATA/ICAO

Hazard class: 8 Packing group: II

ID number: UN 1760

Hazard label: 8

Proper shipping name: CORROSIVE LIQUID, N.O.S. (contains FATTY ACIDS, TALL-OIL,

REACTION PRODUCTS WITH DIETHYLENETRIAMINE)

Information on any special precautions which a user needs to be aware of or needs to comply with in connection to transport:

No data available.

# 15. Regulatory Information

#### National legislation/Regulations

Industrial Safety and Health Law (South Korea):

The product is classified as hazardous by ISHL in Korea.

Hazardous Factors to be taken working environment measurement: no

Controlled Hazardous substances: no

Hazardous Factors to be taken special medical check: no

Special Controlled Hazardous substance: no

Control parameters such as occupational exposure limit: no

Hazard determining component(s) for labelling: Fatty acids, tall-oil, reaction products with diethylenetriamine

#### **Chemicals Control Act (South Korea):**

#### **Toxic Substances:**

This product does not contain toxic substances exceeding the concentration limit

# Substances subject to authorization:

This product does not contain substances subject to authorization exceeding the concentration limit

#### **Restricted substances:**

This product does not contain restricted substances exceeding the concentration limit

### **Prohibited substances:**

This product does not contain prohibited substances exceeding the concentration limit

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## **Substances requiring preparation for accidents:**

This product does not contain substances requiring preparation for accidents exceeding the concentration limit

Dangerous Goods Control Law (Korea):

4th group (Petroleum Group 4), Hazard Category III

Waste management law (Korea):

All national and local regulations of this product should be observed and dispose in accordance with relevant regulations

### Other regulations

No data available.

### 16. Other Information

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Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.