

Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 16.10.2018

Product: **Efka® FA 4609 AN**

Version: 1.1

(ID no. 30630458/SDS_GEN_00/EN)

Date of print 29.10.2023

1. Identification

Product identifier

Efka® FA 4609 AN

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Raw material for coatings for industrial or professional use, additives for inks, varnishes or coatings, dispersing agent

Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Global Business Unit Resins and Additives

Telephone: +49 621 60-72509

E-mail address: ed-psr@basf.com

Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Flam. Liq. 3

Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

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STOT SE 3 (Vapours may cause drowsiness and dizziness.)
STOT SE 3 (irritating to respiratory system)
Aquatic Acute 3
Aquatic Chronic 3

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word:
Danger

Hazard Statement:

H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye/face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/gas/mist/vapours.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P264	Wash with plenty of water and soap thoroughly after handling.
P242	Use only non-sparking tools.
P240	Ground and bond container and receiving equipment.

Precautionary Statements (Response):

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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 doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use foam or dry powder for extinction.

Precautionary Statements (Storage):

P403 + P235	Store in a well-ventilated place. Keep cool.
P233	Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Other hazardsAccording to UN GHS criteria

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

3. Composition/Information on Ingredients**Substances**

Not applicable

MixturesChemical nature

Preparation based on: polyether, modified organic solvents

Hazardous ingredients (GHS)According to UN GHS criteria

| 2-methoxy-1-methylethyl acetate

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Content (W/W): $\geq 15\%$ - $< 50\%$ CAS Number: 108-65-6 EC-Number: 203-603-9 INDEX-Number: 607-195-00-7	Flam. Liq. 3 STOT SE 3 (drowsiness and dizziness) H226, H336
phosphoric acid...%, orthophosphoric acid...%	
Content (W/W): $\geq 1\%$ - $< 3\%$ CAS Number: 7664-38-2 EC-Number: 231-633-2 INDEX-Number: 015-011-00-6	Met. Corr. 1 Acute Tox. 5 (oral) Skin Corr./Irrit. 1B Eye Dam./Irrit. 1 H290, H303, H314
Solvent naphtha (petroleum), light arom.	
Content (W/W): $\geq 20\%$ - $< 50\%$ CAS Number: 64742-95-6 EC-Number: 265-199-0	Asp. Tox. 1 Flam. Liq. 1 Skin Corr./Irrit. 2 STOT SE 3 (drowsiness and dizziness) Aquatic Acute 2 Aquatic Chronic 2 H224, H315, H304, H336, H401, H411 EUH066
modified Polyalkyleneglykolphosphate	
Content (W/W): $\geq 25\%$ - $< 75\%$ CAS Number: 1538608-23-9	Skin Corr./Irrit. 2 Eye Dam./Irrit. 1 H318, H315

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

Description of first aid measures

Immediately remove contaminated clothing.

If inhaled:

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

On skin contact:

Wash thoroughly with soap and water.

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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 immediately and then drink plenty of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Indication of any immediate medical attention and special treatment needed

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam

Special hazards arising from the substance or mixture

harmful vapours

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

Advice for fire-fighters

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, protective equipment and emergency procedures

Use personal protective clothing. Breathing protection required.

Environmental precautions

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

Methods and material for containment and cleaning up

For large amounts: Pump off product.

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For residues: 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.

Protection against fire and explosion:

Sources of ignition should be kept well clear. Take precautionary measures against static discharges. If delivered in plastic packing, highest permissible emptying temperature is 5 Kelvin below the flash point.

Conditions for safe storage, including any incompatibilities

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

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

fluoroelastomer (FKM) - 0.7 mm coating thickness

Polyethylene-Laminate (PE laminate) - ca. 0.1 mm coating thickness

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

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:

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

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Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form:	liquid	
Colour:	yellow to red	
Odour:	solvent-like	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	not determined	
solidification temperature:	not determined	
Boiling point:	140 °C (1.013 hPa)	
Flash point:	43 °C	
Evaporation rate:	not determined	
Flammability:	Flammable.	
Lower explosion limit:	not determined	
Upper explosion limit:	not determined	
Ignition temperature:	315 °C	(DIN 51794)
Vapour pressure:	not determined	
Density:	1,02 g/cm ³ (20 °C)	(ISO 2811-3)
Relative density:	1,02 (20 °C)	
Relative vapour density (air):	not determined	
Solubility in water:	not soluble	
Solubility (qualitative) solvent(s):	alcohols	
Partitioning coefficient n-octanol/water (log Kow):	not applicable for mixtures	
Self ignition:	not self-igniting	
Thermal decomposition:	not determined	

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Viscosity, dynamic: 2.200 mPa.s
(23 °C)
Explosion hazard: not explosive
Fire promoting properties: not fire-propagating

Other information

Hygroscopy: Non-hygroscopic
Surface tension:
Grain size distribution: No data available.
The substance / product is marketed or used in a non solid or granular form.

10. Stability and Reactivity

Reactivity

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

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.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:
strong oxidizing agents

Hazardous decomposition products

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

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Experimental/calculated data:
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.

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LC50 rat (by inhalation):
not determined

LD50 rat (dermal):
not determined

Irritation

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant.

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

Experimental/calculated data:
not determined

Germ cell mutagenicity

Assessment of mutagenicity:

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

Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

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 toxicity (single exposure)

Assessment of STOT single:

Causes temporary irritation of the respiratory tract. Possible narcotic effects (drowsiness or dizziness).

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

Repeated dose toxicity and Specific target organ toxicity (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.

12. Ecological Information

Toxicity

Toxicity to fish:

LC50 (96 h) 10 - 100 mg/l, Fish

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

Aquatic invertebrates:

LC50 (48 h), daphnia

not determined

Aquatic plants:

EC50 (72 h), algae

not determined

Microorganisms/Effect on activated sludge:

EC50 (0,5 h), bacteria

not determined

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.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The polymer component of the product is poorly biodegradable.

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

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Bioaccumulative potential

Assessment bioaccumulation potential:
 The product has not been tested.

Mobility in soil

Assessment transport between environmental compartments:
 Volatility: 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.

13. Disposal Considerations

Waste treatment methods

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.

14. Transport Information

Land transport

ADR

UN number	UN1993
UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (contains SOLVENT NAPHTHA)
Transport hazard class(es):	3
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Tunnel code: D/E

RID

UN number	UN1993
UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (contains SOLVENT NAPHTHA)
Transport hazard class(es):	3
Packing group:	III

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Environmental hazards: no
Special precautions for user: None known

Inland waterway transport

ADN

UN number: UN1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains SOLVENT NAPHTHA)
Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number: UN 1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains SOLVENT NAPHTHA)
Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Marine pollutant: NO
Special precautions for user: None known

Air transport

IATA/ICAO

UN number: UN 1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains SOLVENT NAPHTHA)
Transport hazard class(es): 3
Packing group: III
Environmental hazards: No Mark as dangerous for the environment is needed
Special precautions for user: None known

Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation: Not evaluated

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Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Not applicable

16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Flam. Liq.	Flammable liquids
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Met. Corr.	Corrosive to metals
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H290	May be corrosive to metals.
H303	May be harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H224	Extremely flammable liquid and vapour.
H315	Causes skin irritation.
H304	May be fatal if swallowed and enters airways.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H318	Causes serious eye damage.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.

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