

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023 Version 3.3
Replaces the version from: 20/09/2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier
- | | |
|-----------------|--|
| Substance name: | Acetic acid, oxo-, potassium salt, reaction products with ethylenediamine and hydroxybenzenesulfonic acid monopotassium salt, iron potassium salts |
| EC No.: | 462-490-6 |
| REACH No.: | 01-0000019539-58-XXXX |
| Trade name: | MASQUOL-ATE Fe Al 350 K |
| Trade code: | S6-17383 |
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
- Recommended use:
Trace element for agriculture.
- Uses advised against:
- 1.3. Details of the supplier of the safety data sheet
- | | |
|----------------------------|--------------------------------|
| Supplier: | SYNTHRON |
| Street: | 6 rue Barbès |
| Postal code/city: | 92532 LEVALLOIS PERRET |
| P.O. Box: | CS80050 |
| Country: | FRANCE |
| Telephone: | (33).01.41.34.14.00 |
| Telefax: | (33).01.41.34.14.16 |
| E-mail (competent person): | reach@protex-international.com |
- 1.4. Emergency telephone number
ORFILA: (33)-01-45-42-59-59

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)
The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
Adverse physicochemical, human health and environmental effects:
No other hazards
- 2.2. Label elements
The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
Hazard pictograms:
None
Hazard statements:
None
Precautionary statements:
None
Special Provisions:
None
Special provisions according to Annex XVII of REACH and subsequent amendments:
None
- 2.3. Other hazards
No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023 Version 3.3
Replaces the version from: 20/09/2021

3.1. Substances

Substance name: Iron complex of EDDHAS, potassium salt
EC No...: 462-490-6

Hazardous components within the meaning of the CLP regulation and related classification:
None.

SECTION 4: First aid measures

4.1. Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

After inhalation:

No special measures are necessary.

Following skin contact:

Subsequently wash off with: Water.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion:

Rinse mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed

Skin irritation.

Impairment of vision.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jet.

Dry extinguishing powder.

Foam.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:

Carbon monoxide (CO).

Carbon dioxide (CO₂).

Nitrogen oxides (NO_x).

Sulphur oxides (SO_x).

5.3. Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Collect contaminated fire extinguishing water separately. Do not allow to enter drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Personal protection equipment: see section 8.

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023

Version 3.3

Replaces the version from:

20/09/2021

For emergency responders:

Personal protection equipment: see section 8.

6.2. Environmental precautions

Cover drains.

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

Ensure waste is collected and contained.

In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment:

Cover drains.

For cleaning up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth or universal binding agents).

Collect in closed and suitable containers for disposal.

Wash with plenty of water.

6.4. Reference to other sections

Safe handling: see section 7.

Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures:

Personal protection equipment: see section 8.

Fire prevention measures:

No special fire protection measures are necessary.

Advices on general occupational hygiene:

When using do not eat, drink, smoke, sniff.

Wash hands before breaks and after work.

Used working clothes should not be worn outside the work area.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Requirements for storage rooms and vessels:

Suitable container/equipment material:

Glass.

Varnished iron.

Polyethylene (PE).

Unsuitable container/equipment material:

Iron.

Aluminium.

Suitable floor material:

The floor should be leak tight, jointless and not absorbent.

Fire prevention measures:

No special fire protection measures are necessary.

Hints on joint storage:

Do not store together with: Light metals, Strong oxidising agents.

Further information on storage conditions:

Do not store at temperatures below: 5 °C.

7.3. Specific end use(s)

Identified use: see section 1.

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023 Version 3.3
Replaces the version from: 20/09/2021

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

No data available.

PNEC-values

No data available.

DNEL-values

No data available.

8.2. Exposure controls

Appropriate engineering controls:

See chapter 7. No additional measures necessary.

Personal protective equipment:

Eye/face protection:

Goggles (DIN 166).

Skin protection:

Hand protection:

Chemical resistant protective gloves (DIN EN 374).

Iron complex of EDDHAS, potassium salt

Suitable material: Butyl caoutchouc (butyl rubber) By long-term hand contact

Suitable material: NBR (nitrile rubber) By long-term hand contact

Suitable material: PVC (polyvinyl chloride) By long-term hand contact

Body protection:

Wearing of fully sealed work clothing is recommended.

Chemical resistant safety shoes.

Respiratory protection:

Usually no respiratory personal protective equipment is required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid.

Colour: Brown-red.

Odour: Slight odor.

Odour threshold: No data available.

pH value ca. 7.5 in delivery state at °C: 20
(NFT 01-013)

Melting point / melting range <0 °C

Boiling temperature / boiling range ca.100 °C

Flash point >100 °C

Vapourisation rate / Evaporation rate No data available.

Flammable solids: Not Relevant

Upper/lower flammability or explosive limits:

No data available.

Vapour pressure ca.2.5000 kPa /20 °C

Relative vapour density at 20 °C (air=1) No data available.

Density 1.30

Solubility:

Water solubility: Miscible.

Partition coefficient n-octanol/water (log P O/W) No data available.

Self ignition temperature ca.367 °C

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023 Version 3.3
Replaces the version from: 20/09/2021

Decomposition temperature	>=150 °C		
Dynamic viscosity:	<100mPa*s	/20 °C	(NFT 51210)
Explosive properties	No		
Oxidizing power	No		
9.2. Other information			
Liquid density in kg/l	1.30/20 °C		(NFT 20050)

SECTION 10: Stability and reactivity

- 10.1. Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.
Corrosive to metals: Aluminium.
- 10.2. Chemical stability
The product is stable if stored as prescribed/indicated.
- 10.3. Possibility of hazardous reactions
No hazardous reaction when stored and handled according to instruction.
- 10.4. Conditions to avoid
Decomposition takes place from temperatures above: 150 °C
See section 7.
- 10.5. Incompatible materials
Materials to avoid: Light metals, Strong oxidising agents.
- 10.6. Hazardous decomposition products
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological information

- 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Iron complex of EDDHAS, potassium salt
Acute oral toxicity - Test: LD50 Rat > 2000 mg/kg - Method: OECD 423 - Source: Chemical safety report - Assessment: Not classified.
Acute dermal toxicity - Test: LD50 Rat > 2000 mg/kg 24 h - Method: OECD 402 - Source: Chemical safety report - Assessment: Not classified.
Acute inhalation toxicity - Test: LC50 Rat > 4200 mg/m³ 4 h - Method: OECD 403 - Source: Chemical safety report - Notes: The statement is derived from products of similar structure or composition - Assessment: Not classified.
Skin corrosion / Irritation Rabbit - Method: OECD 404 - Source: Chemical safety report - Assessment: Slightly irritant but not relevant for classification.
Eye damage / irritation Rabbit - Method: OECD 405 - Source: Chemical safety report - Assessment: Not an irritant.
Skin sensitisation Guinea pig - Method: OECD 406 - Source: Chemical safety report - Assessment: Not sensitising.
Specific target organ toxicity (repeated exposure) - Test: NOEL(C) oral Rat = 1000 mg/kg bw/day 28 d - Method: OECD 407 - Source: Chemical safety report
Specific target organ toxicity (repeated exposure) - Test: NOEL(C) dermal Rat = 100 mg/kg bw/day 28 d - Method: OECD 410 - Source: Chemical safety report - Notes: The statement is derived from products of similar structure or composition
Specific target organ toxicity (repeated exposure) inhalative - Source: Chemical safety report - Notes: Study scientifically not justified
Germ cell mutagenicity / Genotoxicity - Test: Gene-mutations microorganisms in vitro mutagenicity Salmonella typhimurium - Method: OECD 471 (Ames test) - Source: Chemical safety report - Assessment: No mutagenic.
Germ cell mutagenicity / Genotoxicity - Test: Gene-mutations mammalian cells in vitro mutagenicity Mouse lymphoma cells - Method: OECD 476 - Source: Chemical safety

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023

Version 3.3

Replaces the version from:

20/09/2021

report - Notes: The statement is derived from products of similar structure or composition - Assessment: No mutagenic.

Adverse effects on sexual function and fertility - Test: NOAEL(C) oral Rat = 50 mg/kg bw/day 1 generation - Method: OECD 415 - Source: Chemical safety report - Notes:

The statement is derived from products of similar structure or composition

Adverse effects on developmental toxicity - Test: NOEL(C) oral Rat = 500 mg/kg

bw/day - Method: OECD 414 - Source: Chemical safety report - Notes: The statement is derived from products of similar structure or composition

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Iron complex of EDDHAS, potassium salt

Acute (short-term) fish toxicity - Test: LC50 > - mg/l: 100 mg/L - Duration: 96 h -

Species: Oncorhynchus mykiss (rainbow trout) - Method: OECD 203 - Source:

Chemical safety report.

Acute (short-term) daphnia toxicity - Test: CE50 > - mg/l: 100 mg/L - Duration: 48 h -

Species: Daphnia magna (Big water flea) - Method: OECD 202 - Source: Chemical

safety report.

Chronic (long-term) daphnia toxicity - Test: NOEC \geq - mg/l: 100 mg/L - Duration: 21 d

- Species: Daphnia magna (Big water flea) - Method: OECD 211 - Source: Chemical

safety report. - Notes: The statement is derived from products of similar structure or composition

Acute (short-term) algae toxicity - Test: CE50 > - mg/l: 100 mg/L - Duration: 72 h -

Species: Scenedesmus subspicatus - Method: OECD 201 - Source: Chemical safety

report.

Respiratory inhibition of municipal activated sludge - Test: CE50 > - mg/l: 100 mg/L -

Duration: 3 h - Method: OECD 209 - Source: Chemical safety report.

Chronical earthworm toxicity - Test: NOEC = - mg/l: 1600 mg/kg - Duration: 14 d -

Species: Eisenia fetida - Source: Chemical safety report. - Notes: The statement is

derived from products of similar structure or composition

Overall evaluation:

12.2. Persistence and degradability

Iron complex of EDDHAS, potassium salt

Abiotic degradation in water - Test: Hydrolysis > 365 d - Source: Chemical safety report

Abiotic degradation in water - Test: Photolysis ≤ 40.66 h - Source: Chemical safety

report - Notes: The statement is derived from products of similar structure or

composition

Abiotic degradation in air - Test: Photolysis < - %: 6 - Duration: 1 d - Source: Chemical

safety report - Notes: The statement is derived from products of similar structure or

composition

Biodegradation = - %: 39 - Duration: 28 d - Method: OECD 301B - Source: Chemical

safety report - Notes: The statement is derived from products of similar structure or

composition - Assessment: Not readily biodegradable (according to OECD criteria).

Effects in sewage plants - Source: Chemical safety report - Assessment: In aerobic

conditions, intrinsically biodegradable product.

12.3. Bioaccumulative potential

Iron complex of EDDHAS, potassium salt

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023 Version 3.3
Replaces the version from: 20/09/2021

Partition coefficient n-octanol/water (log Pow) = - 4 - Method: Estimation - Source: Chemical safety report - Assessment: Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

- 12.4. Mobility in soil
Iron complex of EDDHAS, potassium salt
Transport soil-water - Source: Chemical safety report. - Assessment: Adsorption to solid soil phase is not expected.
Known or predicted distribution to environmental compartments:
No data available.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration $\geq 0.1\%$
- 12.7. Other adverse effects
The product does not contain organically bound halogen.
Theoretical oxygen demand (ThOD): 300 mgO₂/g
Biochemical oxygen demand (BOD): 20 mgO₂/g/5d

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Appropriate disposal / Product
Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.
Appropriate disposal / Package
Contaminated packages must be completely emptied and can be re-used following proper cleaning.
Packaging which cannot be cleaned should be disposed of as the product contents.
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SECTION 14: Transport information

- 14.1. UN number
Not classified as dangerous in the meaning of transport regulations (ADR, IATA, IMDG).
- 14.2. UN proper shipping name
No data available.
- 14.3. Transport hazard class(es)
No data available.
- 14.4. Packing group
No data available.
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
No data available.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No

SECTION 15: Regulatory information

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

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023 Version 3.3
Replaces the version from: 20/09/2021

Volatile organic compounds (VOC) content in percent by weight: 0 %(calculated)
Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles - Annex XVII to Regulation (EC) No 1907/2006: No.
Water hazard class (WGK): Slightly hazardous to water (WGK 1).
15.2. Chemical safety assessment
No

SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training. The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

Paragraphs modified from the previous revision: 2.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

MASQUOL-ATE Fe Al 350 K

Revision date 6/2/2023

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Replaces the version from:

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