

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

1.1. Product identifier

Product form : Mixture
Trade name : SOLFOXIDANTE

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Use only as fungicide and acaricide for agriculture and horticulture in accordance with the product label.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

AZUFRERA Y FERTILIZANTES PALLARES, S.A.U.
Av. Europa Parcela 1 – 7 (Pol.Ind. Constantí)
43120 Constantí (Tarragona)
España
T + 34 977 524 650 - F + 34 977 524 651
afepasa@afepasa.com - www.afepasa.com

1.4. Emergency telephone number

Emergency number : +34 977 524 650
Office hours, Monday to Friday (08:00-17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|-------------------|------|
| Eye Dam. 1 | H318 |
| Aquatic Chronic 2 | H411 |

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye damage. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS09

Signal word (CLP) : Danger
Contains : potassium permanganate
Hazard statements (CLP) : H318 - Causes serious eye damage.
H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP) : P261 - Avoid breathing mist, dust.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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EUH-statements : contact lenses, if present and easy to do. Continue rinsing.
P501 - Dispose of contents and container to appropriate collection point.
: EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|------------|---|
| sulfur | CAS-No.: 7704-34-9 EC-No.: 231-722-6 EC Index-No.: 016-094-00-1 REACH-no: 01-2119487295-27 | ≥ 80 | Skin Irrit. 2, H315 |
| potassium permanganate substance with a Community workplace exposure limit | CAS-No.: 7722-64-7 EC-No.: 231-760-3 EC Index-No.: 025-002-00-9 REACH-no: 01-2119480139-34 | ≤ 0.5 | Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Repr. 2, H361d STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10) |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Remove the person from the exposure area and remove stained or splashed clothing. Keep the patient at rest. Maintain body temperature. Monitor breathing. If necessary give artificial respiration. If the person is unconscious, lay them on their side with their head lower than the rest of the body and their knees semi-bent. DO NOT LEAVE THE INTOXICATED PERSON ALONE IN ANY CASE.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration as needed.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water. Ensure adequate flushing of eyes by separating eyelids with the fingers. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

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First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Give water to drink if victim completely conscious/alert. If vomiting occur, keep the affected person inclined in order to avoid the vomit entering to the airways. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Contact and / or ingestion of large amounts can cause:
From irritation to corrosion of eyes, skin, mucous membranes, respiratory and gastrointestinal tract
Toxic effects at the CNS level, headache, disorders of consciousness, amnesia, tremors and seizures.
In repeated contact allergic dermatitis and lung sensitization.

Symptoms/effects after eye contact : Serious damage to eyes.

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

Treat symptomatically. In case of ingestion, digestive decontamination according to the state of consciousness. Contra indications. Ipecac syrup. When contacting a physician, take this SDS with you.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Sulphur oxides. Hydrogen sulfide. Carbon oxides (CO, CO₂).

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Remove ignition sources.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials. If a major spill occurs, all personnel should be immediately evacuated and the area ventilated. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Do not allow to enter drains or water courses.

Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|--|
| Additional hazards when processed | : Avoid dust production. |
| Precautions for safe handling | : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin, eyes and clothing. Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Wear personal protective equipment. |
| Hygiene measures | : Wash hands and forearms thoroughly after handling. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|------------------------|---|
| Storage conditions | : Keep only in the original container in a cool, well ventilated place away from: Moisture, Sources of ignition, Strong oxidizing agents. Keep container closed when not in use. Store in a well-ventilated place. Keep cool. |
| Incompatible products | : Oxidizing agent. Strong bases. |
| Incompatible materials | : Sources of ignition. Direct sunlight. |

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| potassium permanganate (7722-64-7) | |
|--|--|
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| Local name | Potassium permanganate |
| IOEL TWA | 0.05 mg/m ³ (respirable fraction) 0.2 mg/m ³ (inhalable fraction) |
| Remark | (Year of adoption 2011) |
| Regulatory reference | SCOEL Recommendations |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

| sulfur (7704-34-9) | |
|---------------------------------|-----------|
| PNEC (Oral) | |
| PNEC oral (secondary poisoning) | 220 mg/kg |

| potassium permanganate (7722-64-7) | |
|--|-------------------------|
| DNEL/DMEL (Workers) | |
| Long-term - systemic effects, inhalation | 0.218 mg/m ³ |

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potassium permanganate (7722-64-7)

DNEL/DMEL (General population)

| | |
|--|------------------------------|
| Long-term - systemic effects, oral | 0.01111 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 0.0389 mg/m ³ |

PNEC (Water)

| | |
|--------------------------------------|-----------|
| PNEC aqua (freshwater) | 0.06 µg/l |
| PNEC aqua (intermittent, freshwater) | 0.6 µg/l |

PNEC (STP)

| | |
|-----------------------------|-----------|
| PNEC sewage treatment plant | 1.64 mg/l |
|-----------------------------|-----------|

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation to minimize exposure to dust. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses (UNE-EN 166:2002)

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear chemically resistant gloves.

8.2.2.3. Respiratory protection

Respiratory protection:

Mask type FFP1 (according to the standard UNE-EN 149:2001+A1:2010 or mask type P1 according to the standards UNE-EN 143:2001, UNE-EN 143/AC:2002, UNE-EN 143:2001/AC:2005, UNE-EN 143:2001/A1:2006)

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--------------------------------|
| Physical state | : Solid |
| Colour | : Yellow. |
| Appearance | : Powder. |
| Odour | : Characteristic. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not applicable |
| Boiling point | : Not available |
| Flammability | : Non flammable. |
| Explosive properties | : Not explosive. (EEC MT A17). |
| Oxidising properties | : No oxidising. |
| Explosive limits | : Not applicable |
| Lower explosion limit | : Not applicable |
| Upper explosion limit | : Not applicable |
| Flash point | : Not applicable |
| Auto-ignition temperature | : 221 °C Test method EU A.16 |
| Decomposition temperature | : Not available |
| pH | : 9.4 20.4 °C |
| pH solution | : Not available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : 134.1 mPa·s |
| Solubility | : Insoluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour Pressure 20°C | : Not available |
| Vapour pressure at 50 °C | : Not available |
| Density | : Not available |
| Relative density | : Not available |
| Vapour density | : Not applicable |
| Particle size | : Not available |
| Particle size distribution | : Not available |
| Particle shape | : Not available |
| Particle aspect ratio | : Not available |
| Particle aggregation state | : Not available |
| Particle agglomeration state | : Not available |
| Particle specific surface area | : Not available |
| Particle dustiness | : Not available |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

| | |
|------------------|--|
| Bulk density | : 0.85 g/cm ³ compacted (CIPAC MT 33) |
| Other properties | : Moisture: ≤ 0.20 % |

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No polymerization. No dangerous reactions known under normal conditions of use. Sulfur is a strong reducing agent and it may generate explosions in contact with oxidizing agents. Acid gases, like sulfur dioxide or sulfur steam mist, may be produced during sulfur combustion in the absence of oxygen.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidising agents. Strong bases. Strong acids.

10.6. Hazardous decomposition products

Sulphur oxides. Hydrogen sulfide. Combustion produces toxic gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (On basis of test data)
Acute toxicity (dermal) : Not classified (On basis of test data)
Acute toxicity (inhalation) : Not classified (On basis of test data)

| SOLFOXIDANTE | |
|-----------------------------------|--|
| LD50 oral | > 2000 mg/kg Test method EU B.1 (tris) |
| LD50 dermal | > 2000 mg/kg Test method EU B.3 |
| LC50 Inhalation - Rat (Dust/Mist) | > 5.24 mg/l/4h Test method EU B.2 |

| sulfur (7704-34-9) | |
|-----------------------------------|-------------------------|
| LD50 oral rat | > 2000 mg/kg bodyweight |
| LD50 dermal rat | > 2000 mg/kg bodyweight |
| LC50 Inhalation - Rat (Dust/Mist) | > 5.43 mg/l/4h |

| potassium permanganate (7722-64-7) | |
|------------------------------------|--------------|
| LD50 dermal rat | > 2000 mg/kg |

Skin corrosion/irritation : Not classified (On basis of test data. Test method EU B.4)
pH: 9.4 20.4 °C

Serious eye damage/irritation : Causes serious eye damage. On basis of test data. Test method EU B.5
pH: 9.4 20.4 °C

Respiratory or skin sensitisation : Not classified (On basis of test data. Test method EU B.6. Magnusson & Kligman)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met.)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met.)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met.)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met.)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met.)

| sulfur (7704-34-9) | |
|--|-----------------------|
| NOAEL, subchronic, oral, rat, systemic | 1000 mg/kg bw/day |
| NOAEL, subacute, Dermal, rat, systemic | 400-1000 mg/kg bw/day |

| potassium permanganate (7722-64-7) | |
|------------------------------------|--|
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met.)

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| | |
|----------------------|----------------|
| Viscosity, kinematic | Not applicable |
|----------------------|----------------|

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.
Ecology - water : Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met.)
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

potassium permanganate (7722-64-7)

| | |
|----------------------|------------------------------------|
| LC50 - Fish [1] | 0.47 mg/l 96h, Poecilia reticulata |
| EC50 - Crustacea [1] | 0.06 mg/l 48h, Daphnia magna |

12.2. Persistence and degradability

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| | |
|-------------------------------|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. Once sulfur is released into the environment, is rapidly oxidized by bacteria, other microorganisms or spontaneously by the presence of oxygen, to become organic sulfur compounds. Sulfur is incorporated to the food chain by the action of the microorganism present in water and soil, through oxidation and reduction reactions allowing the assimilation of these compounds by higher plants and animals. |
|-------------------------------|---|

sulfur (7704-34-9)

| | |
|-------------------------------|--|
| Persistence and degradability | Not applicable for inorganic products. |
|-------------------------------|--|

12.3. Bioaccumulative potential

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| | |
|---------------------------|---|
| Bioaccumulative potential | Sulfur has, generally, a lifecycle and a mobility similar to nitrogen's, characteristic of those nutrients essential for cellular life development. It is not solubilized in water. |
|---------------------------|---|

potassium permanganate (7722-64-7)

| | |
|---|--------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | -1.73 |
| Bioaccumulative potential | Low bioaccumulation potential. |

12.4. Mobility in soil

SOLFOXIDANTE

| | |
|----------------|---|
| Ecology - soil | Sulfur has, generally, a lifecycle and a mobility similar to nitrogen's, characteristic of those nutrients essential for cellular life development. It is not solubilized in water. |
|----------------|---|

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12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

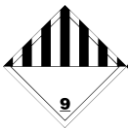



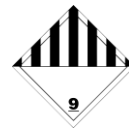
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point.
Additional information : The use of incinerators is not recommended due to the occurrence of SO₂ during the combustion, toxic to human and environment.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID /

| ADR | IMDG | IATA | ADN | RID |
|--|---|---|---|---|
| 14.1. UN number or ID number | | | | |
| UN 3077 | UN 3077 | UN 3077 | UN 3077 | UN 3077 |
| 14.2. UN proper shipping name | | | | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. | Environmentally hazardous substance, solid, n.o.s. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| Transport document description | | | | |
| UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (potassium permanganate), 9, III, (E) | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (potassium permanganate), 9, III, MARINE POLLUTANT | UN 3077 Environmentally hazardous substance, solid, n.o.s. (potassium permanganate), 9, III | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (potassium permanganate), 9, III | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (potassium permanganate), 9, III |
| 14.3. Transport hazard class(es) | | | | |
| 9 | 9 | 9 | 9 | 9 |
|  |  |  |  |  |
| 14.4. Packing group | | | | |
| III | III | III | III | III |

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| ADR | IMDG | IATA | ADN | RID |
|--|---|------------------------------------|------------------------------------|------------------------------------|
| 14.5. Environmental hazards | | | | |
| Dangerous for the environment: Yes | Dangerous for the environment: Yes Marine pollutant: Yes | Dangerous for the environment: Yes | Dangerous for the environment: Yes | Dangerous for the environment: Yes |
| No supplementary information available | | | | |

14.6. Special precautions for user

Overland transport

| | |
|---|---|
| Classification code (ADR) | : M7 |
| Special provisions (ADR) | : 274, 335, 601 |
| Limited quantities (ADR) | : 5kg |
| Excepted quantities (ADR) | : E1 |
| Packing instructions (ADR) | : P002, IBC08, LP02, R001 |
| Special packing provisions (ADR) | : PP12, B3 |
| Mixed packing provisions (ADR) | : MP10 |
| Portable tank and bulk container instructions (ADR) | : T1, BK1, BK2 |
| Portable tank and bulk container special provisions (ADR) | : TP33 |
| Tank code (ADR) | : SGAV, LGBV |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 3 |
| Special provisions for carriage - Packages (ADR) | : V13 |
| Special provisions for carriage - Bulk (ADR) | : VV1 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV13 |
| Hazard identification number (Kemler No.) | : 90 |
| Orange plates | :  |
| Tunnel restriction code (ADR) | : E |

Transport by sea

| | |
|-----------------------------------|----------------------|
| Special provisions (IMDG) | : 274, 335, 966, 967 |
| Limited quantities (IMDG) | : 5 kg |
| Excepted quantities (IMDG) | : E1 |
| Packing instructions (IMDG) | : P002, LP02 |
| Special packing provisions (IMDG) | : PP12 |
| IBC packing instructions (IMDG) | : IBC08 |
| IBC special provisions (IMDG) | : B3 |
| Tank instructions (IMDG) | : T1, BK1, BK2, BK3 |
| Tank special provisions (IMDG) | : TP33 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-F |
| Stowage category (IMDG) | : A |
| MFAG-No | : 171 |

Air transport

| | |
|--|-------------------------|
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y956 |
| PCA limited quantity max net quantity (IATA) | : 30kgG |
| PCA packing instructions (IATA) | : 956 |
| PCA max net quantity (IATA) | : 400kg |
| CAO packing instructions (IATA) | : 956 |
| CAO max net quantity (IATA) | : 400kg |
| Special provisions (IATA) | : A97, A158, A179, A197 |
| ERG code (IATA) | : 9L |

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Inland waterway transport

| | |
|---------------------------------------|--|
| Classification code (ADN) | : M7 |
| Special provisions (ADN) | : 274, 335, 61 |
| Limited quantities (ADN) | : 5 kg |
| Excepted quantities (ADN) | : E1 |
| Carriage permitted (ADN) | : T* B** |
| Equipment required (ADN) | : PP, A |
| Number of blue cones/lights (ADN) | : 0 |
| Additional requirements/Remarks (ADN) | : * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of transport in bulk. |

Rail transport

| | |
|---|---------------------------|
| Classification code (RID) | : M7 |
| Special provisions (RID) | : 274, 335, 601 |
| Limited quantities (RID) | : 5kg |
| Excepted quantities (RID) | : E1 |
| Packing instructions (RID) | : P002, IBC08, LP02, R001 |
| Special packing provisions (RID) | : PP12, B3 |
| Mixed packing provisions (RID) | : MP10 |
| Portable tank and bulk container instructions (RID) | : T1, BK1, BK2 |
| Portable tank and bulk container special provisions (RID) | : TP33 |
| Tank codes for RID tanks (RID) | : SGAV, LGBV |
| Transport category (RID) | : 3 |
| Special provisions for carriage – Packages (RID) | : W13 |
| Special provisions for carriage – Bulk (RID) | : VW1 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : CW13, CW31 |
| Colis express (express parcels) (RID) | : CE11 |
| Hazard identification number (RID) | : 90 |

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

| Name | CN designation | CAS-No. | CN code | Category | Threshold | Annex |
|------------------------|----------------|-----------|------------|-------------|-----------|-------------------|
| Potassium permanganate | | 7722-64-7 | 2841 61 00 | Categoría 2 | 100 kg | Anexo I, Anexo II |

15.1.2. National regulations

No additional information available

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.2. Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

For the following substances of this mixture a chemical safety assessment has been carried out:

Sulfur
potassium permanganate

SECTION 16: Other information

Indication of changes

| Section | Changed item | Change | Comments |
|---------|--|----------|----------|
| | Revision date | Modified | |
| | Issue date | Modified | |
| | Supersedes | Modified | |
| 3 | Composition/information on ingredients | Modified | |
| 9.2 | Other information | Modified | |
| 12.2 | Persistence and degradability | Modified | |
| 12.3 | Bioaccumulative potential | Modified | |
| 16 | Abbreviations and acronyms | Modified | |

Abbreviations and acronyms:

| | |
|-------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| EC50 | Median effective concentration |
| LC50 | Median lethal concentration |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LD50 | Median lethal dose |
| NOAEL | No-Observed Adverse Effect Level |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| STP | Sewage treatment plant |
| vPvB | Very Persistent and Very Bioaccumulative |

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. SDS EU format according to COMMISSION REGULATION (EU) 2020/878.

Other information

: Refer to the safety data sheet before handling or disposing.

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Full text of H- and EUH-statements:

| | |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| H272 | May intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Ox. Sol. 2 | Oxidising Solids, Category 2 |
| Repr. 2 | Reproductive toxicity, Category 2 |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| | | |
|-------------------|------|-----------------------|
| Eye Dam. 1 | H318 | On basis of test data |
| Aquatic Chronic 2 | H411 | Calculation method |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.