

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 06/10/2022 Revision date: 06/10/2022 Version: 1.0

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

1.1. Product identifier Product form : Mixture Product name : HG chimney cleaner Product code : 432 ART Product group : Trade product 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses Intended for general public Main use category : Consumer use 1.2.2. Uses advised against Restrictions on use : All other uses not recommended above 1.3. Details of the supplier of the safety data sheet Supplier Distributor HG International B.V. HG UKI LTD P.J. Oudweg 41 Weston Business Centre NL-1314 CJ Almere Parsonage Road UK- CM22 6PU Takeley - Essex The Netherlands T +31 (0)36 54 94 700 United Kingdom safety@hg.eu - www.hg.eu T +44 (0) 1206 822 744 www.hg.eu 1.4. Emergency telephone number Emergency number : +31 (0)36 54 94 777 Only for medical personnel Mon-Fri 09:00 AM - 05:00 PM (CEST)

| Country | Organisation/Company | Address | Emergency number | Comment |
|---------|----------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------|---------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

| Acute toxicity (oral), Category 4 | H302 |
|-------------------------------------------------------------------|------|
| Serious eye damage/eye irritation, Category 1 | H318 |
| Hazardous to the aquatic environment – Acute Hazard, Category 1 | H400 |
| Hazardous to the aquatic environment – Chronic Hazard, Category 1 | H410 |
| Full text of H- and EUH-statements: see section 16 | |

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

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2.2. Label elements

| Labelling according to Regulation (EC) N | lo. 1272/2008 [CLP] |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard pictograms (CLP) | |
| | GHS05 GHS07 GHS09 |
| Signal word (CLP) | : Danger |
| Contains | : Ammonium chloride, Copper sulphate |
| Hazard statements (CLP) | H302 - Harmful if swallowed. H318 - Causes serious eye damage. H410 - Very toxic to aquatic life with long lasting effects. |
| Precautionary statements (CLP) | P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear eye protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 - Dispose of contents and container to a hazardous or special waste collection point. |
| 2.3 Other hazards | |

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 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 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | Conc. (% w/w) | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------|
| Sodium chloride substance with national workplace exposure limit(s) (LT, LV) | CAS-No.: 7647-14-5 EC-No.: 231-598-3 REACH-no: 01-2119485491- 33 | ≥ 50 – < 75 | Not classified |
| Ammonium chloride substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FR, GB, GR, HR, IE, LT, LV, PL, PT, RO) | CAS-No.: 12125-02-9 EC-No.: 235-186-4 EC Index-No.: 017-014-00-8 REACH-no: 01-2119487950- 27 | ≥ 10 – < 25 | Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 |
| zinc oxide substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GR, HR, HU, IE, LT, LV, PL, PT, RO, SE, SK) | CAS-No.: 1314-13-2 EC-No.: 215-222-5 EC Index-No.: 030-013-00-7 REACH-no: 01-2119463881- 32 | ≥5-<7 | Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

inorganic

inorganic

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| Name | Product identifier | Conc. (% w/w) | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------|
| Copper sulphate substance with national workplace exposure limit(s) (FI, NL); substance with a Community workplace exposure limit | CAS-No.: 7758-99-8 EC-No.: 231-847-6 EC Index-No.: 029-004-00-0 REACH-no: 01-2119520566- 40 | ≥5-<7 | Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 |
| Ammoniumsulfate substance with national workplace exposure limit(s) (BG, LV) | CAS-No.: 7783-20-2 EC-No.: 231-984-1 REACH-no: 01-2119455044- 46 | ≥5-<7 | Not classified |

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 | : Call a poison center or a doctor if you feel unwell. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor. |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. |
| First-aid measures after ingestion | : Rinse mouth. Call a poison center or a doctor if you feel unwell. Loosen tight clothing such as a collar, tie, belt or waistband. |
| 4.2. Most important symptoms and effects, | both acute and delayed |
| Symptoms/effects after skin contact Symptoms/effects after eye contact | Irritation. Redness. Serious damage to eyes. Eye irritation. redness, itching, tears. |

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 Unsuitable extinguishing media | Water spray. Dry powder. Foam.Do not use a solid water stream as it may scatter and spread fire. | | |
| 5.2. Special hazards arising from the substance or mixture | | | |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. | | |
| 5.3. Advice for firefighters | | | |
| Precautionary measures fire Protection during firefighting | Evacuate area. Stop leak if safe to do so. 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, pr | otective equipment and emergency procedures | | |
| General measures | : Evacuate area. Stop leak if safe to do so. | | |

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| 6.1.1. For non-emergency personnel | |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emergency procedures | : Ventilate spillage area. Avoid contact with skin and eyes. Do not touch or walk on the spilled product. Evacuate unnecessary personnel. Keep unnecessary and unprotected personnel away from the spillage. Do not breathe dust. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |

6.2. Environmental precautions

Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses. Notify authorities if product enters sewers or public waters.

| 6.3. Methods and material for containment and cleaning up | | |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| For containment Methods for cleaning up | Collect spillage. Stop leak if safe to do so. Avoid formation of dust. Mechanically recover the product. Minimise generation of dust. Use of a vacuum with high efficiency particulate air (HEPA) filtration is recommended. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. This material and its | |
| Other information | container must be disposed of in a safe way, and as per local legislation.Dispose of materials or solid residues at an authorized site. | |
| 6.4. Reference to other sections | | |

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

| SECTION 7: Handling and storage | | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 7.1. Precautions for safe handling | | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep only in original container. | |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | |
| 7.2. Conditions for safe storage, inc | luding any incompatibilities | |
| Storage conditions | : Store in a closed container. Protect from sunlight. Store in dry, cool, well-ventilated area. Store in original container. Store locked up. | |
| Incompatible materials | : Keep away from (strong) acids. Oxidizing materials. | |
| Storage area | : Store according to local legislation. | |
| Special rules on packaging | : Keep only in original container. | |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| zinc oxide (1314-13-2) | |
|----------------------------------------|---------------------------------------------|
| Ireland - Occupational Exposure Limits | |
| Local name | Zinc oxide, fume |
| OEL TWA [1] | 2 mg/m ³ R (Respirable Fraction) |
| OEL STEL | 10 mg/m ³ |
| Regulatory reference | Chemical Agents Code of Practice 2021 |

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| Ammonium chloride (12125-02-9) | | |
|-----------------------------------------------------------|-------------------------|--|
| Ireland - Occupational Exposure Limits | | |
| Local name | Ammonium chloride, fume | |
| OEL TWA [1] | 10 mg/m ³ | |
| OEL STEL | 20 mg/m ³ | |
| egulatory reference Chemical Agents Code of Practice 2021 | | |
| Copper sulphate (7758-99-8) | | |
| EU - Indicative Occupational Exposure Limit (IOEL) | | |
| Local name Copper(II) sulfate pentahydrate | | |
| OEL TWA 0.01 mg/m ³ (respirable fraction) | | |
| Remark | (Year of adoption 2014) | |
| 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

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Do not breathe dust.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields

| Eye protection | | | |
|----------------------------------|-----------------------|-----------------|----------|
| Туре | Field of application | Characteristics | Standard |
| Safety glasses with side shields | Normal use conditions | | EN 166 |

8.2.2.2. Skin protection

Skin and body protection:

Long sleeved protective clothing. Chemical resistant safety shoes

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| Skin and body protection | | |
|----------------------------------|----------|--|
| Туре | Standard | |
| Long sleeved protective clothing | | |
| Chemical resistant safety shoes | | |

Hand protection:

Protective gloves

| Hand protection | | | | | |
|-------------------|----------------------|-------------------|----------------|-------------|------------|
| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Disposable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | 0.35 | | EN ISO 374 |
| Disposable gloves | Butyl rubber | 6 (> 480 minutes) | 0.5 | | EN ISO 374 |

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment

| Respiratory protection | | | |
|------------------------|-------------|-----------------|----------|
| Device | Filter type | Condition | Standard |
| Dust mask | FFFP2 | Dust protection | EN 149 |

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

| 9.1. Information on basic physical and ch | hemical properties |
|-------------------------------------------------|-----------------------------|
| Physical state | : Solid |
| Colour | : white to slightly yellow. |
| Odour | : odourless. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not applicable |
| Boiling point | : Not available |
| Flammability | : Non flammable. |
| Explosive limits | : Not applicable |
| Lower explosion limit | : Not applicable |
| Upper explosion limit | : Not applicable |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : Not available |
| рН | : 7.41 |
| pH solution concentration | : 1% |
| Viscosity, kinematic | : Not applicable |
| Solubility | : Not available |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50 °C | : Not available |
| Density | : Not available |
| Relative density | : 0.92 – 0.97 |

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| Relative vapour density at 20 °C | : 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

No additional information available

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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Avoid dust formation. Do not allow water (or moist air) contact with this material. Keep away from (strong) acids. Protect from sunlight.

10.5. Incompatible materials

Alkalines. Acids. Oxidizing agent. metals.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

| Acute toxicity (dermal) | Harmful if swallowed. Not classified Not classified |
|-----------------------------|-----------------------------------------------------------|
| HG chimney cleaner | |
| ATE CLP (oral) | 500 mg/kg bodyweight |
| Sodium chloride (7647-14-5) | |
| LD50 oral rat | 3000 mg/kg Source: ChemIDplus |
| LD50 oral | 3000 mg/kg bodyweight |
| LD50 dermal rabbit | > 10000 mg/kg bodyweight Animal: rabbit |
| LD50 dermal | > 10000 mg/kg bodyweight |

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| Sodium chloride (7647-14-5) | | |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| LC50 Inhalation - Rat (Dust/Mist) | > 42000 mg/l | |
| zinc oxide (1314-13-2) | | |
| LD50 oral rat | > 5000 mg/kg Source: ECHA | |
| LD50 dermal rat | > 2000 mg/kg Source: ECHA | |
| LC50 Inhalation - Rat | > 5700 mg/m ³ Source: ECHA | |
| Ammonium chloride (12125-02-9) | | |
| LD50 oral rat | 1410 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 1260 - 1550 | |
| LD50 oral | 1410 mg/kg bodyweight | |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)) | |
| LD50 dermal | > 2000 mg/kg bodyweight | |
| Copper sulphate (7758-99-8) | | |
| LD50 oral rat | 960 mg/kg Source: HSDB | |
| LD50 oral | 300 mg/kg bodyweight | |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other: | |
| LC50 Inhalation - Rat | 9.92 mg/l Source: GESTIS | |
| Ammoniumsulfate (7783-20-2) | | |
| LD50 oral rat | > 2000 mg/kg Source: ECHA | |
| LD50 oral | 4250 mg/kg bodyweight | |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 434 (Acute Dermal Toxicity - Fixed Dose Procedure) | |
| LD50 dermal | > 2000 mg/kg bodyweight | |
| Skin corrosion/irritation : | Not classified pH: 7.41 | |
| zinc oxide (1314-13-2) | | |
| рН | 6.95 Source: HSDB | |
| Ammonium chloride (12125-02-9) | | |
| рН | 5 – 5.5 Temp.: 25 °C Concentration: [1 vol%,10 vol%] Remarks on result: 'other:' | |
| Copper sulphate (7758-99-8) | | |
| рН | 4 Source: HSDB | |
| Ammoniumsulfate (7783-20-2) | | |
| рН | 5.5 Source: HSDB | |
| Serious eye damage/irritation : | Causes serious eye damage. pH: 7.41 | |
| zinc oxide (1314-13-2) | | |
| рН | 6.95 Source: HSDB | |
| Ammonium chloride (12125-02-9) | | |
| рН | 5 – 5.5 Temp.: 25 °C Concentration: [1 vol%,10 vol%] Remarks on result: 'other:' | |
| | | |

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| Copper sulphate (7758-99-8) | |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| рН | 4 Source: HSDB |
| Ammoniumsulfate (7783-20-2) | |
| рН | 5.5 Source: HSDB |
| Respiratory or skin sensitisation : | Not classified |
| Germ cell mutagenicity : | Not classified |
| Carcinogenicity : | Not classified |
| Ammoniumsulfate (7783-20-2) | |
| NOAEL (chronic, oral, animal/male, 2 years) | 256 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| NOAEL (chronic, oral, animal/female, 2 years) | 284 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| Reproductive toxicity : | Not classified |
| STOT-single exposure : | Not classified |
| STOT-repeated exposure : | Not classified |
| Ammonium chloride (12125-02-9) | |
| NOAEL (oral, rat, 90 days) | ≈ 1695.7 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) |
| Aspiration hazard : | Not classified |
| HG chimney cleaner | |
| Viscosity, kinematic | Not applicable |
| 11.2. Information on other hazards | |

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

| Very toxic to aquatic life with long lasting effects.Very toxic to aquatic life. |
|-------------------------------------------------------------------------------------------------------------|
| : Very toxic to aquatic life with long lasting effects. |
| |
| |
| 5840 mg/l |
| 4136 mg/l waterflea |
| 2430 mg/l |
| 441 mg/l Test organisms (species): Daphnia pulex Duration: '21 d' |
| 314 mg/l Test organisms (species): Daphnia pulex Duration: '21 d' |
| |
| 123.8 mg/l |
| 136.6 mg/l Test organisms (species): Daphnia magna |
| 0.39 mg/l waterflea |
| 7.16 mg/l |
| |

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| Ammoniumsulfate (7783-20-2) | | |
|------------------------------------|-----------------------------------------------------------|--|
| LC50 - Fish [1] | 173 mg/l | |
| LC50 - Fish [2] | 57.2 mg/l Test organisms (species): Prosopium williamsoni | |
| EC50 - Crustacea [1] | 169 mg/l Test organisms (species): Daphnia magna | |
| EC50 - Other aquatic organisms [1] | > 100 mg/l waterflea | |

12.2. Persistence and degradability

No additional information available

| Sodium chloride (7647-14-5)Partition coefficient n-octanol/water (Log Pow)-3Ammonium chloride (12125-02-9)Partition coefficient n-octanol/water (Log Pow)-4.37Copper sulphate (7758-99-8)Partition coefficient n-octanol/water (Log Pow)-0.17Ammoniumsulfate (7783-20-2)Partition coefficient n-octanol/water (Log Pow)-5.1 | 12.3. Bioaccumulative potential | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|--|--|
| Ammonium chloride (12125-02-9) Partition coefficient n-octanol/water (Log Pow) -4.37 Copper sulphate (7758-99-8) Partition coefficient n-octanol/water (Log Pow) -0.17 Ammoniumsulfate (7783-20-2) | Sodium chloride (7647-14-5) | Sodium chloride (7647-14-5) | | |
| Partition coefficient n-octanol/water (Log Pow) -4.37 Copper sulphate (7758-99-8) Partition coefficient n-octanol/water (Log Pow) -0.17 Ammoniumsulfate (7783-20-2) | Partition coefficient n-octanol/water (Log Pow) | -3 | | |
| Copper sulphate (7758-99-8) Partition coefficient n-octanol/water (Log Pow) -0.17 Ammoniumsulfate (7783-20-2) | Ammonium chloride (12125-02-9) | | | |
| Partition coefficient n-octanol/water (Log Pow) -0.17 Ammoniumsulfate (7783-20-2) -0.17 | Partition coefficient n-octanol/water (Log Pow) -4.37 | | | |
| Ammoniumsulfate (7783-20-2) | Copper sulphate (7758-99-8) | | | |
| | Partition coefficient n-octanol/water (Log Pow) -0.17 | | | |
| Partition coefficient n-octanol/water (Log Pow) -5.1 | Ammoniumsulfate (7783-20-2) | | | |
| | Partition coefficient n-octanol/water (Log Pow) -5.1 | | | |

12.4. Mobility in soil

No additional information available

| 12.5. Results of PBT and vPvB assessment | | |
|------------------------------------------|--|--|
| HG chimney cleaner | | |
| inorganic | | |
| inorganic | | |
| 12.6. Endocrine disrupting properties | | |

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) Waste treatment methods

: Dispose of in accordance with relevant local regulations.

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- **SECTION 14: Transport information**

| In accordance with ADR / IMDG / IATA / ADN / RID | | | |
|--------------------------------------------------|--------------|-----------|---------------|
| IMDG | ΙΑΤΑ | ADN | RID |
| 14.1. UN number or ID number | | | |
| UN 3077 | UN 3077 | UN 3077 | UN 3077 |
| | IMDG nber | IMDG IATA | IMDG IATA ADN |

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| ADR | IMDG | ΙΑΤΑ | ADN | RID | | |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
| 14.2. UN proper shipping name | | | | | | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate) | Environmentally hazardous substance, solid, n.o.s. (zinc oxide ; Copper sulphate) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate) | | |
| Transport document descr | iption | · | | | | |
| UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate), 9, III, (-) | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate), 9, III, MARINE POLLUTANT | UN 3077 Environmentally hazardous substance, solid, n.o.s. (zinc oxide ; Copper sulphate), 9, III | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate), 9, III | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide ; Copper sulphate), 9, III | | |
| 14.3. Transport hazard o | lass(es) | | | | | |
| 9 | 9 | 9 | 9 | 9 | | |
| | | | | | | |
| 14.4. Packing group | | | | | | |
| 111 | III | | | | | |
| 14.5. Environmental haz | ards | | | | | |
| 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 informatio | • | | | | | |

14.6. Special precautions for user

Overland transport

| Classification code (ADR) | : | M7 |
|------------------------------------------------------|---|-------------------------|
| Special provisions (ADR) | : | 274, 335, 375, 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, BK3 |
| Portable tank and bulk container special provisions | : | TP33 |
| (ADR) | | |
| 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) | : | VC1, VC2 |
| Special provisions for carriage - Loading, unloading | : | CV13 |
| and handling (ADR) | | |
| Hazard identification number (Kemler No.) | : | 90 |
| Orange plates | : | 00 |
| | | 90 |
| | | 2077 |
| | | 30// |
| | | |

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| Tunnel restriction code (ADR) | : - |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Transport by sea | |
| Special provisions (IMDG) | : 274, 335, 966, 967, 969 |
| Limited quantities (IMDG) | : 5 kg |
| Excepted quantities (IMDG) | : E1 |
| Packing instructions (IMDG) | : LP02, P002 |
| Special packing provisions (IMDG) | : PP12 |
| IBC packing instructions (IMDG) | : IBC08 |
| IBC special provisions (IMDG) | : B3 |
| Tank instructions (IMDG) | : BK1, BK2, BK3, T1 |
| Tank special provisions (IMDG) | : TP33 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-F |
| Stowage category (IMDG) | : A |
| Stowage and handling (IMDG) | : SW23 |
| | . 50025 |
| 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, A215 |
| ERG code (IATA) | : 9L |
| Inland waterway transport | |
| Classification code (ADN) | : M7 |
| Special provisions (ADN) | : 274, 335, 375, 601 |
| 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, 375, 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, BK3 |
| | : TP33 |
| (RID) | . 1100 |
| Tank codes for RID tanks (RID) | : SGAV, LGBV |
| Transport category (RID) | : 3 : 3 |
| , | : 9 : W13 |
| Special provisions for carriage – Packages (RID) | : VC1, VC2 |
| Special provisions for carriage – Bulk (RID) | |
| Special provisions for carriage - Loading, unloading | : CW13, CW31 |
| and handling (RID) | . 0544 |
| Colis express (express parcels) (RID) | : CE11 |
| Hazard identification number (RID) | : 90 |

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

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.

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

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.

Explosives Precursors Regulation (2019/1148)

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.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Printed by ExESS software. SDS EU format according to COMMISSION REGULATION (EU) 2020/878.

| 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 |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |

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| Abbreviations and acronyms: | | |
|-----------------------------|------------------------------------------------------------------------------|--|
| EC50 | Median effective concentration | |
| EN | European Standard | |
| IARC | International Agency for Research on Cancer | |
| ΙΑΤΑ | International Air Transport Association | |
| IMDG | International Maritime Dangerous Goods | |
| LC50 | Median lethal concentration | |
| LD50 | Median lethal dose | |
| LOAEL | Lowest Observed Adverse Effect Level | |
| NOAEC | No-Observed Adverse Effect Concentration | |
| NOAEL | No-Observed Adverse Effect Level | |
| NOEC | No-Observed Effect Concentration | |
| OECD | Organisation for Economic Co-operation and Development | |
| OEL | Occupational Exposure Limit | |
| РВТ | Persistent Bioaccumulative Toxic | |
| PNEC | Predicted No-Effect Concentration | |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail | |
| SDS | Safety Data Sheet | |
| STP | Sewage treatment plant | |
| ThOD | Theoretical oxygen demand (ThOD) | |
| TLM | Median Tolerance Limit | |
| VOC | Volatile Organic Compounds | |
| CAS-No. | Chemical Abstract Service number | |
| N.O.S. | Not Otherwise Specified | |
| vPvB | Very Persistent and Very Bioaccumulative | |
| ED | Endocrine disrupting properties | |

| 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 | |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 | |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | |
| H302 | Harmful if swallowed. | |
| H318 | Causes serious eye damage. | |
| H319 | Causes serious eye irritation. | |
| H400 | Very toxic to aquatic life. | |
| H410 | Very toxic to aquatic life with long lasting effects. | |

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.