

SAFETY DATA SHEET (EN)

Falu Rödfärg Original and Sprutfärg, black and grey colours

This safety data sheet complies with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: Falu Rödfärg Original and Sprutfärg, black and grey colours

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

Relevant identified uses of the substance or mixture:Consumer outdoor painting. Professional outdoor painting. Usage in
industrial facilities.Uses advised against:No known.

1.3 Details of the supplier of the safety data sheet

| Stora Kopparbergs Bergslags AB, Falu Rödfärg |
|---|
| Krongårdsvägen 6 |
| 791 61 |
| Falun |
| Sweden |
| +46 23-78 23 25 (Available during office hours) |
| info@falurodfarg.com |
| |

1.4 Emergency telephone number

Emergency telephone number: 112 - (available 24/7). Emergency telephone number - National Poisons Information Centre: Call 112 and request Poison Information - available 24/7

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2009 (CLP):

This product meets the criteria for classification according to Regulation (EC) No 1272/2008 on the classification, labelling, and packaging of substances and mixtures.

| Hazard class | Hazard category | Hazard statement |
|-----------------|-----------------|---|
| Aquatic Chronic | 3 | H412: Harmful to aquatic life with long lasting effects |

2.1.2 Additional information

The mixture is not classified as skin sensitizing based on the results of similar tested mixtures, applying bridging principles in accordance with Article 9.4 of the CLP Regulation. The mixture is classified as Aquatic Chronic 3 H412 based on testing according to OECD 201. For full text regarding hazard statements and EU hazard statements, see SECTION 16.



2.2 Label elements

Labelling according to Regulation (EC) 1272/2008 (CLP).

| Hazard pictogram(s): | N/A | | | | | |
|-------------------------------------|---|--|--|--|--|--|
| Composition on label: | N/A | | | | | |
| Signal word: | N/A | N/A | | | | |
| Hazard statements: | H412 Harmful to aquatic life with long lasting effects. | | | | | |
| | P102 | Keep out of reach of children. | | | | |
| | P260 | Do not breathe dust/mist/spray. | | | | |
| Precautionary statement(s): | P280 | Wear protective gloves/protective clothing/eye protection/face protection. | | | | |
| | P273 | Avoid release to the environment. | | | | |
| | P501 | Dispose of contents/container to an approved waste disposal facility. | | | | |
| | EUH201 | Contains lead. Should not be used on surfaces liable to be chewed or sucked by children. | | | | |
| Supplemental labelling (EUH): | EUH208 | Contains Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2- methyl-2H-isothiazol-3-one (CMIT/MIT), 2-octyl-2H-isothiazol-3- one(OIT) and 4,5-dichloro-2-octyl-2H-isothiazol-3-one (DCOIT). May produce an allergic reaction. | | | | |
| Tactile warnings of danger (TWD): | No | | | | | |
| Child-resistant fastening (CRF): | No | | | | | |
| Other labelling requirements in EU: | The mixture is a treated article but is not subject to any specific labelling requirements under Article 58 of REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products. | | | | | |

2.3 Other hazards

| vPvB / PBT | The mixture does not contain substances meeting the criteria to be vPvB (vPvB = very persistent and very bioaccumulative) and is not subject to Annex XIII of Regulation (EC) 1907/2006 (>0.1%). |
|----------------|--|
| | The mixture does not contain substances meeting the criteria to be PBT (PBT = persistent, bioaccumulative, and toxic) and is not subject to Annex XIII of Regulation (EC) 1907/2006 (>0.1%). |
| Other hazards: | The product does not contain ingredients considered to have endocrine-disrupting properties according to REACH Article 57(f). |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N/A

3.2 Mixtures

The following ingredients classified as hazardous are included in the mixture.

| Substance name | | CAS Number | EC Number | Weight % content (or range) | Classification according to (EC) No 1272/2008 (CLP) | SCL/ M-factor/ ATE |
|-------------------------|---------------------|------------|-----------|-----------------------------------|--|-----------------------------------|
| Falu Rödfärg pigment | Copper(II)s alts | 1317-38-0 | 215-269-1 | < 0,05 | Aquatic Acute 1 H400 Aquatic Chronic 1 H410 | M(acute) = 100 M(chronic) = 10 |

Page **3** of **13** Safety data sheet according to Regulation (EC) No 1907/2006, Bilaga II Revision date: 2025-02-14 Replacing date: 2024-05-08



| Substance name | | CAS Number | EC Number | Weight % content (or | Classification according to (EC) No 1272/2008 (CLP) | SCL/ M-factor/ ATE |
|---|--|------------|-----------|-------------------------|--|---|
| (Feldspar minerals, | (Copper oxide) ^a | | | range) | | |
| magnetite and quartz, calcination products of copper mining) | Lead compound s (Index No: 082- 001-00-6) ^a | - | N/A | < 0,3 | Acute Tox. 4 H302 Acute Tox. 4 H332 Repr. 1A H360 Df STOT RE 2 H373 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 | Repr. 2; H361f: C ≥ 2,5 % STOT RE 2; H373: C ≥ 0,5 % |
| EC nr: 944- 188-0 Reach reg. nr: 01- 2120733886- 42-0000 | Quartz ^b | 14808-60-7 | 238-878-4 | < 2 | - | |
| Mixture of 5-chl methyl-2H-isoth and 2-methyl-2H 3-one (CMIT/MI | iiazol-3-one H-isothiazol- | 55965-84-9 | N/A | < 0,0015 | Acute Tox. 3 H301 Acute Tox. 2 H310 Acute Tox. 2 H330 Skin Corr. 1C H314 Eye Dam. 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Skin Sens. 1A H317 EUH071 | Skin Corr. 1C; H314: $C \ge 0,6 \%$ Skin Irrit. 2; H315: 0,06 % $\le C$ < 0,6 % Eye Dam. 1; H318: $C \ge 0,6 \%$ Eye Irrit. 2; H319: 0,06 % $\le C < 0,6 \%$ Skin Sens. 1A; H317: $C \ge 0,0015 \%$ M(acute) = 100 M(chronic) = 100 |
| 2-octyl-2H-isoth (OIT) ^a | iazol-3-one | 26530-20-1 | 247-761-7 | < 0,01 | Acute Tox. 3 H301 Acute Tox. 3 H311 Acute Tox. 2 H330 Skin Corr. 1 H314 Eye Dam. 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Skin Sens. 1A H317 EUH071 | LD ₅₀ Oral: 125 mg/kg LD ₅₀ dermal: 311 mg/kg LC ₅₀ / 4 h inhalativ: 0,27 mg/l Skin Sens. 1A H317: C ≥0,0015 % M(acute) = 100 M(chronic) = 100 |
| 4,5-dichloro-2-octyl-2H- isothiazol-3-one (DCOIT) ^a | | 64359-81-5 | 264-843-8 | < 0,01 | Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Acute Tox. 4 H302 Skin Sens. 1A H317 EUH071 | LD ₅₀ Oral: 567 mg/kg LC ₅₀ / 4 h inhalativ: 0,16 mg/l Eye Irrit. 2; H319: 0,025 % \leq C < 3 % Skin Irrit. 2; H315: 0,025 % \leq C < 5 % |



| Substance name | CAS Number | EC Number | Weight % | Classification according to | SCL/ M-factor/ | |
|---|------------------|-------------------|---------------------|--------------------------------|--------------------|--|
| | | | content (or | (EC) No 1272/2008 (CLP) | ATE | |
| | | | range) | | | |
| | | | | | Skin Sens. 1A; | |
| | | | | | H317: C ≥ 0,0015 | |
| | | | | | % | |
| | | | | | M(acute) = 100 | |
| | | | | | M(chronic) = 100 | |
| a) Harmonized classification according to Annex VI, Part 3, Table 3, of Regulation (EC) 1272/2008 (CLP). | | | | | | |
| b) Classification according to joint submissions in ECHA's Classification and Labelling Inventory (C&L Inventory) | | | | | | |
| c) Classification according to t | he most notified | l classification: | s in ECHA's Classif | ication and Labelling Inventor | y (C&L Inventory). | |

Additional information:

For the text of the hazard statements and classification codes, refer to SECTION 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

| Inhalation: | Ensure access to fresh air. In case of inhalation of spray mist: move the person to fresh air and allow them to rest. Contact a doctor if symptoms occur and persist. |
|---|--|
| Skin contact: | Remove splattered and contaminated clothing. Wash exposed skin areas with soap and plenty of water. Rinse with copious amounts of water. Seek medical device if discomfort occurs or persists. |
| Eye contact: | Remove any contact lenses. Do not rub the eyes. Rinse with open eyes for several minutes under running water. Occasionally lift the upper and lower eyelids. Use lukewarm water if possible. Contact a doctor if irritation occurs and persists. |
| Ingestion: | Rinse mouth thoroughly with plenty of water. Contact a doctor if larger amounts have been ingested. If the person affected is fully conscious, give them a couple of glasses of water or milk. Never attempt to give liquids to an unconscious person. Contact a doctor if symptoms occur and persist. |
| Personal protective equipment for first aid responders: | No special personal protective equipment is required. |

4.2 Most important symptoms and effects, both acute and delayed

| Inhalation: | No inhalation exposure is expected during painting as respiratory protection is recommended during spray painting and brushing. |
|---------------|--|
| Skin contact: | The mixture contains substances in low concentrations that may cause allergy upon skin contact, leading to redness, itching, and inflammation of the skin. |
| Eye contact: | Splashes in the eyes can cause redness, itching, and watery eyes, as well as temporary vision impairment. |
| Ingestion: | Ingestion of large amounts can result in nausea, stomach pain, vomiting, and diarrhoea. |

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

The mixture is not easily flammable. Select appropriate firefighting equipment based on the situation.

Appropriate extinguishing media:

Carbon dioxide, powder, or water extinguishers. Larger fires should be fought with alcohol-resistant foam.

Page **5** of **13** Safety data sheet according to Regulation (EC) No 1907/2006, Bilaga II Revision date: 2025-02-14 Replacing date: 2024-05-08



Inappropriate extinguishing media:

For safety reasons, water extinguishers with a strong jet should not be used as they can spread and escalate the fire.

5.2 Special hazards arising from the substance or mixture

During a fire, harmful gases can form.

5.3 Advice for firefighters

Wear full protective clothing and a self-contained breathing apparatus during firefighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin, eyes, and clothing. When handling situations that may result in inhalation exposure, use appropriate respiratory equipment and protective clothing (see section 8).

6.2 Environmental precautions

Prevent discharge into sewers, surface water, or groundwater. In case of discharge into watercourses or sewer systems, relevant authorities should be informed. Contact the Fire and Rescue Service in case of major spills.

6.3 Methods and material for containment and cleaning up

Splashes can be wiped up with absorbent material such as a cloth.

Absorb minor spills with appropriate inert absorbent material (e.g., sand, activated clay, multisorb). Collect in suitable waste containers labelled with content. Treat this as hazardous waste.

For larger spills, dam the spilled material if possible. Absorb with vermiculite, sand, or soil and place in labelled containers. Dispose of the spill as hazardous waste.

6.4 Reference to other sections

Refer to SECTION 8 for personal protective equipment. Refer to SECTION 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

For outdoor use only, except for use in industrial facilities. Avoid inhalation of grinding dust and spray mist, as well as contact with skin and eyes. Use appropriate personal protective equipment. Prevent environmental release. For information on protective equipment, see section 8.2.

General advice for good work hygiene:

Wash hands thoroughly with soap and plenty of water after handling the mixture and before breaks, before using the restroom, and after completing work. Remove contaminated work clothes and wash them before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of reach of children and separate from food. Store the mixture in closed containers under frost-free conditions.

7.3 Specific end use(s)

Outdoor painting by consumers. Professional outdoor painting. Use in industrial facilities.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure values for the impurity lead in Falu Rödfärg pigment through the use of Falu Rödfärg black and grey colours: DNEL

| Type av effect | Exposure route | DNEL (mg/m ³) | | | | | | |
|------------------|------------------------------------|---------------------------|--|-----|---|--|--|--|
| | - | | Workers | | General population ¹ | | | |
| Systemic effects | Inhalation (long-term exposure) | 0,05 | DNEL based on occupational exposure limit. | 100 | DNEL is based on the most sensitive population (pregnant women). Therefore, a DNEL of 10 µg/dL, equivalent to 100 mg/m ³ , is used. | | | |
| | Inhalation (acute exposure) | - | No acute/short-term toxicity effects are identified from the pigment based on the properties and classification of the components. | - | No acute/short-term toxicity effects are identified from the pigment based on the properties and classification of the components. | | | |
| Local effects | Inhalation (long-term exposure) | 0,1 | DNEL based on occupational exposure limit. | 100 | Since the DNEL is for systemic effects, it could be adjusted to local effects with a factor of 0.5, accounting for the difference in occupational exposure limit between systemic and local effects. However, as a conservative approach, the same DNEL is used for local long-term effects as for systemic long-term effects. Therefore, a DNEL of 10 µg/dL, equivalent to 100 mg/m ³ , is used. | | | |
| | Inhalation (acute exposure) | - | No acute/short-term toxicity effects are identified from the pigment based on the properties and classification of the components. | - | No acute/short-term toxicity effects are identified from the pigment based on the properties and classification of the components. | | | |
| Systemic effects | Dermal (long-term exposure) | - | No systemic toxicological effects from dermal exposure are identified from the pigment based on the properties and classification of the components. | - | No systemic toxicological effects from dermal exposure are identified from the pigment based on the properties and classification of the components. | | | |
| | Dermal (acute exposure) | - | No systemic toxic effects from acute/short-term dermal exposure are identified from the pigment based on the properties and classification of the components. | - | No systemic toxic effects from acute/short-term dermal exposure are identified from the pigment based on the properties and classification of the components. | | | |
| Local effects | Dermal (long-term exposure) | - | No local effects such as skin or eye irritation are identified from prolonged exposure to the pigment based on the properties and classifications of the components. | - | No local effects such as skin or eye irritation are identified from prolonged exposure to the pigment based on the properties and classifications of the components. | | | |
| | Dermal (acute exposure) | - | No local effects such as skin or eye irritation are identified from acute/short-term exposure to the pigment based on the properties and classifications of the components. | - | No local effects such as skin or eye irritation are identified from acute/short-term exposure to the pigment based on the properties and classifications of the components. | | | |
| | Effects on eyes | - | No hazard identified. Safety glasses should be worn when handling the pigment. | - | No hazard identified. | | | |
| Systemic effects | Oral (long-term exposure) | N/A | | - | No exposure from oral ingestion is considered likely. | | | |
| | Oral (acute exposure) | N/A | | - | No exposure from oral ingestion is considered likely. | | | |

¹ The pigment itself is not intended for use by the general public. The public is only exposed to the pigment as a component in Falu Rödfärg Black/Grey Paint. Therefore, the public will not be exposed to the pigment in its powder form.



Exposure estimation from ES 3: Use in industrial facilities, ES 5: Wide-spread use by professionals (paint), and ES 7: Consumer use.

| Protection target | Exposure estimation ES 3: Use in industrial facilities | Exposure estimation ES 5: Wide- spread use by professionals (paint) | Exposure estimation ES 7: Consumer use |
|-------------------------------|---|--|--|
| Freshwater | 5.4E-9 mg/L (EUSES 2.1.2) | 6.33E-6 mg/L (EUSES 2.1.2) | 1.32E-4 mg/L (EUSES 2.1.2) |
| Sediment (freshwater) | 7.47E-6 mg/kg dw (EUSES 2.1.2) | 8.76E-3 mg/kg dw (EUSES 2.1.2) | 0.183 mg/kg dw (EUSES 2.1.2) |
| Seawater | 6.05E-10 mg/L (EUSES 2.1.2) | 6.33E-7 mg/L (EUSES 2.1.2) | 1.32E-5 mg/L (EUSES 2.1.2) |
| Sediment (seawater) | 8.37E-7 mg/kg dw (EUSES 2.1.2) | 8.76E-4 mg/kg dw (EUSES 2.1.2) | 0.018 mg/kg dw (EUSES 2.1.2) |
| Wastewater treatment plant | 0 mg/L (EUSES 2.1.2) | 6.46E-5 mg/L (EUSES 2.1.2) | 1.35E-3 mg/L (EUSES 2.1.2) |
| Jordbruksmark | 3.65E-5 mg/kg dw (EUSES 2.1.2) | 2.88E-3 mg/kg dw (EUSES 2.1.2) | 0.06 mg/kg dw (EUSES 2.1.2) |

The following substances have Swedish occupational exposure limits according to AFS 2018:1. For additional occupational exposure limits, refer to relevant national legislation.

| Substance | CAS-no | Long-term Exposure Limit (LT Values (8h) | Short-term Expos (STEL) Valu | | Year | Annotations* | |
|--|------------|---|---------------------------------|-------|------|--------------|---------|
| | | mg/m ³ | ppm | mg/m³ | ppm | | |
| Quartz | 14808-60-7 | 0.1 (respirable fraction) | | | | 2018 | С, М |
| Lead, and inorg. compounds (such as Pb) | 7439-92-1 | 0.1 (inhalable fraction) 0.05 (respirable fraction) | | | | 2011 | B, M, R |
| Dust, inorganic | N/A | 5 mg/m ³ (inhalable fraction) 2.5 mg/m ³ (respirable fraction) | | | | 2018 | |

* Explanation of annotations can be found in section 16.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Avoid contact with skin, eyes, and clothing. Remove contaminated clothing and wash before reuse.

8.2.2 Individual protection measures, such as personal protective equipment

| Eye/face protection: | Use tightly fitting safety goggles with side shields. |
|--------------------------|--|
| Skin protection (hands): | Wear protective gloves. Recommended glove material (EN374): nitrile rubber. Gloves should be changed regularly and at the slightest sign of damage. |
| Skin protection (body): | Wear protective clothing/workwear with long sleeves and long pants. |
| Respiratory protection: | Use a respirator that meets the requirements according to EN140 with a type P3 filter (particle filter) when there is a risk of inhalation, for example during spray painting or brushing. |

8.2.3 Environmental exposure controls

Prevent paint spills into the environment. For more information regarding waste, refer to section 13.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Parameter | Result/Value | Method/Comment |
|--|----------------|---------------------|
| Physical state | Liquid | @ 20°C and 1013 hPa |
| Colour | Black/grey | @ 20°C and 1013 hPa |
| Odour | Not determined | |
| Melting point/freezing point | Not determined | |
| Boiling point or initial boiling point and boiling range | Not determined | |
| Flammability | Not flammable | |
| Lower and upper explosion limit | Not explosive | |

Page **8** of **13** Safety data sheet according to Regulation (EC) No 1907/2006, Bilaga II Revision date: 2025-02-14 Replacing date: 2024-05-08



| Flash point | Not determined | |
|--|---|--------|
| Auto-ignition temperature | Not determined | |
| Decomposition temperature | Not determined | |
| рН | 6-7 | |
| Kinematic viscosity | Not determined | |
| Solubility | Mixable/emulsifiable in water | |
| Partition coefficient n-octanol/water (log | Not determined | |
| value) | | |
| Vapour pressure | Not determined | |
| Density and/or relative density | 1.16 - 1.19 | @ 20°C |
| Relative vapour density | Not determined | |
| Particle characteristics | Not applicable, the mixture is a liquid | |

9.2 Other information

No other information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No hazardous chemical reactions are expected to occur based on the structure and chemical properties of the components.

10.2 Chemical stability

The substance is stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No hazardous chemical reactions are expected to occur based on the chemical properties of the mixture.

10.4 Conditions to avoid

Protect from moisture and strong oxidizing agents. For more information on correct storage conditions and handling, refer to section 7.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No1272/2008

Exposure to the mixture during prolonged work may result in harmful health effects.

| Acute toxicity: | The mixture is not classified as acute toxic. |
|-----------------------------------|---|
| Skin corrosion/irritation: | The mixture is not classified as corrosive or irritating to the skin. |
| Serious eye damage/irritation: | The mixture is not classified as causing serious eye damage or eye irritation. |
| Respiratory or skin sensitisation | The mixture contains low levels of substances that may cause allergy upon skin contact: preservatives CMIT/MIT, 2-octyl-2H-isothiazol-3-one, MIT, and DCOIT. The mixture is not classified as skin sensitizing based on the results of similar tested mixtures, applying bridging principles in accordance with Article 9.4 of the CLP Regulation. |



| | Study results: Sensitization OECD 429 (LLNA) (mouse) not sensitizing - S4565, Reduced Local Lymph Node Assay (rLLNA) with 5 paint samples (2017) Thor S4565. |
|-------------------------|--|
| Germ cell mutagenicity: | The mixture is not classified as mutagenic based on the properties of the ingredients. |
| Carcinogenicity: | The mixture is not classified as carcinogenic based on the properties of the ingredients. |
| Reproductive toxicity: | The mixture is not classified as reproductive toxic based on the properties of the ingredients. The mixture contains small amounts of the contaminant lead, which has reproductive toxic properties. |
| STOT-single exposure: | The mixture is not classified as specific target organ toxicity - single exposure based on the properties of the ingredients. |
| STOT-repeated exposure: | The mixture is not classified as specific target organ toxicity - repeated exposure based on the properties of the ingredients. |
| Aspiration hazard: | The mixture or its components are not classified as hazardous for aspiration. |

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The product does not contain ingredients considered to have endocrine-disrupting properties according to REACH Article 57(f).

11.2.2 Other information

Not relevant.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

The mixture is classified as Aquatic Chronic 3 H412 based on testing according to OECD 201.

The mixture may cause harmful long-term effects on aquatic organisms based on the included preservatives CMIT/MIT, 2-octyl-2H-isothiazol-3-one, and DCOIT. The mixture also contains lead compounds, zinc(II)salts, and copper(II)salts, which have longterm aquatic toxic effects on the aquatic environment. However, these compounds are present in such low concentrations that they do not contribute to the mixture's classification regarding the environment.

Lead²

Acute toxicity to fish: LC_{50} , 96h, P. promelas (OECD 203): 40.8 µg/L Acute toxicity to crustaceans, Lead: LC_{50} , 48h, C. dubia (OECD 202): 26.4 µg/L Acute toxicity to algae, Lead: LC_{50} , 48h, P. subcapitata (OECD 201): 21.7 µg/L NOEC: 6.2 µg/L freshwater, 11.9 µg/L saltwater

Zinc oxide

Acute toxicity to algae: EC₅₀, 72h, Selenastrum capricornutum: 0.137 mg/l at pH > 7 - 8.5 Acute toxicity to crustaceans: EC₅₀, 48h, Ceriodaphnia dubia: 0.413 mg/l at pH < 7 Chronic toxicity to algae: NOEC, 7 days, Pseudokirchneriella subcapitata: 19 μ g/L at pH 8.0 Chronic toxicity to crustaceans: NOEC, 7 days, Daphnia magna: 82 μ g/L at pH 6.0

12.2 Persistence and degradability

The mixture contains inorganic components that are not biodegradable.

12.3 Bioaccumulative potential

The mixture may cause harmful long-term effects on aquatic organisms.

² The data is based on ecotoxicological data from water-soluble lead salts as well as measured lead concentrations in aqueous solution.



12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

The mixture does not contain substances that meet the criteria for PBT substances (persistent, bioaccumulative, and toxic) or vPvB substances (very persistent and very bioaccumulative) according to REACH (Regulation (EC) No 1907/2006) Annex XIII.

12.6 Endocrine disrupting properties

The product does not contain ingredients considered to have endocrine-disrupting properties according to REACH Article 57(f).

12.7 Other adverse effects

No other known adverse effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product and Packaging Waste:

Both the product and its packaging should be handled as hazardous waste. Disposal, transportation, storage, and handling of the waste shall be carried out in accordance with National Waste Regulation.

Contaminated process water should either be purified in a specific facility for process water treatment or directed to a wastewater treatment plant with both primary and secondary treatment steps.

Proposed waste code for the mixture:

EWC 20 01 27* Paint, printing ink, adhesive, and resin containing hazardous substances and considered hazardous waste.

Proposed waste code for the packaging:

EWC 15 01 10* Packaging containing residues of or contaminated by hazardous substances and considered hazardous waste.

SECTION 14: TRANSPORT INFORMATION

The product is not covered by current regulations for the transport of dangerous goods (IMDG, ICAO/IATA, ADR/RID).

14.1 UN number or ID number

N/A

14.2 UN proper shipping name

N/A

14.3 Transport hazard class(es)

N/A

14.4 Packing group

N/A

14.5 Environmental hazards

N/A



14.6 Special precautions for user

N/A

14.7 Maritime transport in bulk according to IMO instruments

N/A

SECTION 15: REGULATORY INFORMATION

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

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste.
- The Swedish Work Environment Authority legislation considering Occupational Health (Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden, AFS 2018:1).
- EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EU) No 528/2012 of 22 May 2012 concerning the making available on the market and use of biocidal products.

Classification and labelling have been compiled in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

The safety data sheet has been complied in accordance with Annex II in Regulation (EC) No 1907/2006 concerning Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its amendments.

15.2 Chemical safety assessment

A chemical safety report has been prepared for the pigment included in the mixture. Parts from relevant exposure scenarios are incorporated into sections 1, 7, and 8 of the safety data sheet.

SECTION 16: OTHER INFORMATION

The hazard statements in SECTION 3 in full text:

| H301 | Toxic if swallowed. |
|--------|--|
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H332 | Harmful if inhaled. |
| H360Df | May damage fertility or the unborn child <state specific effect if known > <state conclusively="" exposure="" if="" is="" it="" no="" of="" other<br="" proven="" route="" that="">routes of exposure cause the hazard>.</state></state |
| H373 | May cause damage to organs <or affected,="" all="" if="" known="" organs="" state=""> through prolonged or repeated exposure <state cause="" conclusively="" exposure="" hazard="" if="" is="" it="" no="" of="" other="" proven="" route="" routes="" that="" the="">.</state></or> |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effect. |
| EUH071 | Corrosive to the respiratory tract |
| | |



List of abbreviations and acronyms used in the safety data sheet:

AFS: Arbetsmiljöverkets författningssamling (Swedish Work Environment Authority's Statute Book)

DN(M)EL: Derived No (Minimal) Effect Level. The exposure level below which no adverse effects are expected to occur.

EC50: Effect Concentration. The concentration that causes a specific observed or measured effect in 50% of the test organisms within a specified time.

LC50: Lethal Concentration. The concentration that is lethal to 50% of the test organisms within a specified time.

LD50: Lethal Dose. The dose that is lethal to 50% of the test organisms.

NOEC: No Observed Effect Concentration. The highest concentration in a test that does not cause any harmful effects to the test organisms, expressed as a daily dose in mg/kg body weight.

PNEC: Predicted No-Effect Concentration. The concentration of a substance below which no harmful effects are expected to occur in the environment.

UVCB: Substance of Unknown or Variable composition, Complex reaction products or Biological materials

PBT: Persistent, Bioaccumulative, Toxic substances. A PBT substance meets the criteria in part 1, annex XIII of REACH.

vPvB: Very Persistent, Very Bioaccumulative substances. A vPvB substance meets the criteria in part 2, annex XIII of REACH.

SCL: Specific Concentration Limit

ATE: Acute Toxicity Estimate

Notes – Hygienic Limit Values:

B: The substance can cause hearing damage. Exposure to the substance near the existing occupational exposure limit and simultaneous exposure to noise near the action level of 80 dB can cause hearing damage.

C: The substance is carcinogenic. There is a risk of cancer even with exposure routes other than inhalation. For certain carcinogenic substances without limit values, prohibition or authorization requirements apply according to the regulations on chemical work environment risks.

M: Medical examinations. Medical examinations may be required for handling the substance. See the regulations on medical examinations in the workplace. For certain substances, the employer must offer medical check-ups, and for other substances, periodic medical examinations and fitness assessments are required. See the regulations on chemical work environment risks.

R: The substance is reproductive toxic. Reproductive toxic substances are those that can cause harmful effects on reproductive ability or offspring development. See also the regulations on chemical work environment risks and on pregnant and nursing workers.

Revision History:

This version of the Safety Data Sheet (SDS) replaces all previous versions.

This Safety Data Sheet (SDS) is prepared in accordance with Regulation (EC) No 1907/2006 REACH, Article 31, and Annex II. The content is intended to provide appropriate safety measures for handling the substance. It is the responsibility of the recipient of this Safety Data Sheet to disseminate the information. Employers must inform affected workers about the health and accident risks associated with hazardous chemical substances present in the workplace and how to avoid these risks. Employers must ensure that affected workers understand the information.

Stora Enso cannot foresee all conditions under which this information and its product, or other manufacturers' products in combination with its product, may be used. The user is responsible for ensuring safe conditions for handling, storage, and disposal of the product, and is liable for any loss, personal injury, property damage, or costs resulting from improper use. The information sheets have been written in accordance with the best knowledge and experience currently available.

Information on changes:

| Date | Changes |
|------------|---|
| 2025-02-14 | Update of concentration indications in section 3 and substances listed in EUH208 in section 2.2. |
| 2024-05-08 | A new version of the Safety Data Sheet has been prepared, which replaces previous versions. Revision of |
| | all sections of the Safety Data Sheet, updates as needed. |

Page **13** of **13** Safety data sheet according to Regulation (EC) No 1907/2006, Bilaga II Revision date: 2025-02-14 Replacing date: 2024-05-08



Appendixes:

The following relevant exposure scenarios (ES) that have been developed as part of the registration dossier for the pigment according to the REACH Regulation (EC) No 1907/2006 are available upon request:

ES 1: Manufacture of pigment

- ES 2: Formulation of paint or repackaging of pigment
- ES 3: Industrial use
- ES 4: Service life at industrial sites by professional workers
- ES 5: Wide dispersive use by professional workers (paint)
- ES 6: Service life by professional workers
- ES 7: Consumer use
- ES 8: Service life by consumers