



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	Falu Rödfärg Original och Sprutfärg, röda kulörer
Registration number	-
Synonyms	Falu Rödfärg Röd * Falu Rödfärg Ljusröd * Falu Rödfärg utan linolja * Falu rödfärg Röd Sprut färg * Falu Rödfärg Ljusröd sprutfärg
Issue date	18-February-2019
Version number	02
Revision date	28-November-2024
Supersedes date	18-February-2019

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

Identified uses	Professional painting outdoors. Consumer painting outdoors.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier	Stora Kopparbergs Bergslags AB, Falu Rödfärg
Address	Krongårdsvägen 6, 791 61 Falun
Website	info@falurodfarg.com
	Sverige
Telephone number	+46 23 782325
1.4 Emergency telephone number	+44 20 35147487
Access code	334957

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention	
P273	Avoid release to the environment.
Response	Not assigned.
Storage	Not assigned.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental information on the label

EUH201 - Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

EUH208 - Contains 2-octyl-2H-isothiazol-3-one, 4,5-dichloro-2-octyl-2H-isothiazol-3-one; [DCOIT], reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Falu Rödfärg pigment	15 - 16	-	01-2119703173-52-0000	-	
Classification: Repr. 1A;H360D, STOT RE 2;H373, Aquatic Chronic 2;H411					
2-octyl-2H-isothiazol-3-one	0.006	26530-20-1 247-761-7	-	613-112-00-5	
Classification: Acute Tox. 3;H301, Acute Tox. 3;H311, Acute Tox. 2;H330, Skin Corr. 1;H314, Eye Dam. 1;H318, Skin Sens. 1A;H317, Aquatic Acute 1;H400(M=100), Aquatic Chronic 1;H410(M=100)					
Specific Concentration Limits: Skin Sens. 1A;H317: C ≥ 0.0015 %					
4,5-dichloro-2-octyl-2H-isothiazol-3-one; [DCOIT]	0.006	64359-81-5 264-843-8	-	613-335-00-8	
Classification: Acute Tox. 4;H302, Acute Tox. 2;H330, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1A;H317, Aquatic Acute 1;H400(M=100), Aquatic Chronic 1;H410(M=100)					
Specific Concentration Limits: Skin Irrit. 2;H315: 0.025 % ≤ C < 5 %, Eye Irrit. 2;H319: 0.025 % ≤ C < 3 %, Skin Sens. 1A;H317: C ≥ 0.0015 %					
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.0013	55965-84-9 611-341-5	-	613-167-00-5	
Classification: Acute Tox. 3;H301, Acute Tox. 2;H310, Acute Tox. 2;H330, Skin Corr. 1C;H314, Eye Dam. 1;H318, Skin Sens. 1A;H317, Aquatic Acute 1;H400(M=100), Aquatic Chronic 1;H410(M=100)					
Specific Concentration Limits: Skin Corr. 1C;H314: C ≥ 0.6 %, Skin Irrit. 2;H315: 0.06 % ≤ C < 0.6 %, Eye Dam. 1;H318: C ≥ 0.6 %, Eye Irrit. 2;H319: 0.06 % ≤ C < 0.6 %, Skin Sens. 1A;H317: C ≥ 0.0015 %					

Constituents

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Quartz (SiO ₂)	< 2	14808-60-7 238-878-4	-	-	#
Lead	< 0.3	7439-92-1 231-100-4	-	082-014-00-7	#
copper(II) oxide	0.0368	1317-38-0 215-269-1	-	029-016-00-6	
Zinc oxide	< 0.1	1314-13-2 215-222-5	-	030-013-00-7	
Feldspar-group minerals	< 0.5	68476-25-5 270-666-7	-	-	
Talc	< 0.3	14807-96-6 238-877-9	-	-	#

List of abbreviations and symbols that may be used above

#: This substance has workplace exposure limit(s).
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.

Composition comments

The full text for all H-statements is displayed in section 16. All concentrations are in percent by weight.

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
4.2. Most important symptoms and effects, both acute and delayed	Direct contact with eyes may cause temporary irritation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
4.3. Indication of any immediate medical attention and special treatment needed	Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards	No unusual fire or explosion hazards noted.
5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	Water runoff can cause environmental damage.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Wear appropriate personal protective equipment.
For emergency responders	Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	This product is miscible in water. Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Absorb spillage with suitable absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Persons susceptible to allergic reactions should not handle this product.
7.2. Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).
7.3. Specific end use(s)	Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Constituents	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	1 mg/m ³	Respirable dust.
Lead (CAS 7439-92-1)	TWA	0.15 mg/m ³	

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Constituents	Type	Value	Form
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General population

Components	Value	Assessment factor	Notes
Falu Rödfärg pigment (CAS -)			
Long-term, Local, Inhalation	100 mg/m ³		
Long-term, Systemic, Inhalation	100 mg/m ³		

Workers

Components	Value	Assessment factor	Notes
Falu Rödfärg pigment (CAS -)			
Long-term, Local, Inhalation	0.1 mg/m ³	1	
Long-term, Systemic, Inhalation	0.05 mg/m ³	1	

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Falu Rödfärg pigment (CAS -)			
Freshwater	3.1 µg/l	2	
Marine water	3.5 µg/l	2	
Secondary poisoning	10.9 mg/kg	6	
Sediment (freshwater)	174 mg/kg	3	
Sediment (marine water)	164 mg/kg	3	
Soil	147 mg/kg	1	
STP	100 µg/l	10	

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

- General information** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
- Eye/face protection** Wear safety glasses with side shields (or goggles). Eye protection should meet standard EN 166.
- Skin protection**
- **Hand protection** Wear appropriate chemical resistant gloves. Glove material: Nitrile rubber. Wear suitable gloves tested to EN374. Suitable gloves can be recommended by the glove supplier.
- **Other** Wear suitable protective clothing.
- Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Follow guidance on selection, use, care and maintenance in accordance with EN 529. Appropriate respirator selection should be made by a qualified professional.
- Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Form	Viscous liquid.
Colour	Red. Light red.
Odour	Not determined.
Odour threshold	Not available.
pH	> 6 - < 7
Melting point/freezing point	> 1000 °C (> 1832 °F)
Initial boiling point and boiling range	Not determined.
Flash point	Not determined.
Evaporation rate	Not available.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not determined.
Explosive limit – upper (%)	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	> 1.16 - < 1.19 (20 °C)
Solubility(ies)	
Solubility (water)	Miscible. Emulsifiable in water.
Partition coefficient (n-octanol/water)	Not determined.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	
Density	Not determined.
Kinematic viscosity	Not determined.
Particle size	Not applicable, material is a liquid.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials. Protect from moisture.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms	Direct contact with eyes may cause temporary irritation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
11.1. Information on toxicological effects	
Acute toxicity	Not expected to be acutely toxic.

Components	Species	Test Results
2-octyl-2H-isothiazol-3-one (CAS 26530-20-1)		
Acute		
Dermal		
ATE		311 mg/kg
Inhalation		
<i>Mist</i>		
ATE		0.27 mg/l
Oral		
ATE		125 mg/kg
Constituents	Species	Test Results
Talc (CAS 14807-96-6)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Zinc oxide (CAS 1314-13-2)		
Acute		
Inhalation		
LC50	Mouse	> 5.7 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
copper(II) oxide (CAS 1317-38-0)		
Acute		
Dermal		
<i>Dust</i>		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
<i>Dust</i>		
LD50	Rat	> 2000 mg/kg, 24 Hours
Quartz (SiO ₂) (CAS 14808-60-7)		
Chronic		
Inhalation		
LOEC	Human	0.0563 mg/m ³
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory sensitisation	Based on available data, the classification criteria are not met.	
Skin sensitisation	Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Based on available data, the classification criteria are not met.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Lead (CAS 7439-92-1)	2B Possibly carcinogenic to humans.	
Talc (CAS 14807-96-6)	3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Mixture versus substance information	No information available.	
Other information	May cause allergic respiratory and skin reactions.	

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

Product	Species		Test Results
Falun Rödfärg Original och Sprutfärg, röda kulörer (CAS Mixture)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 10 mg/l, 72 hours
Components			
2-octyl-2H-isothiazol-3-one (CAS 26530-20-1)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	0.15 mg/l, 72 Hours
Crustacea	EC50	Crustacea	0.181 mg/l, 48 Hours
Fish	LC50	Fish	0.122 mg/l, 96 Hours
<i>Chronic</i>			
Algae	NOEC	Algae	0.068 mg/l, 72 Hours
Crustacea	NOEC	Crustacea	0.035 mg/l, 21 days
Fish	NOEC	Fish	0.022 mg/l, 21 days
Constituents			
Lead (CAS 7439-92-1)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Ceriodaphnia dubia	0.248 mg/l, 48 hours pH8
Fish	LC50	Pimephales promelas	0.283 mg/l, 96 hours pH8

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow) Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil This product is miscible in water and may not disperse in soil.

12.5. Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

SECTION 15: Regulatory information

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

Retained direct EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Lead (CAS 7439-92-1)

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
copper(II) oxide (CAS 1317-38-0)
Lead (CAS 7439-92-1)
Talc (CAS 14807-96-6)
Zinc oxide (CAS 1314-13-2)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Lead (CAS 7439-92-1)

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended
- Conditions of restriction given for the associated entry number should be considered
Lead (CAS 7439-92-1)
Zinc oxide (CAS 1314-13-2)

Other regulations

This product is classified and labelled in accordance with the retained CLP Regulation (EC) No 1272/2008, as amended for Great Britain. This Safety Data Sheet is compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758.

Follow the requirements of the Control of Substances Hazardous to Health Regulations 2002 [SI 2002/2677], as amended, when using this material.

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
IMO: International Maritime Organization.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TWA: Time Weighted Average.
vPvB: Very persistent and very bioaccumulative.
ECHA: European Chemicals Agency

References

Falu Rödfärg Original och Sprutfärg, röda kulörer
946169 Version #: 02 Revision date: 28-November-2024 Issue date: 18-February-2019

SDS Great Britain

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Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

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.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H360D May damage the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure by inhalation.
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.

Training information

Follow training instructions when handling this material.

Disclaimer

Stora Enso cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.