

Safety Data Sheet

Sadolin Outdoor Varnish - Satin

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 - United Kingdom: Northern Ireland

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

1.1 Product identifier

Product name : Sadolin Outdoor Varnish - Satin
Product identity : 030UK00W01
Product type : alkyd varnish

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

Field of application : Decoration of timber surfaces. Applied by brush. See container for details.
Identified uses : Consumer applications, Professional applications.

1.3 Details of the supplier of the safety data sheet

Company details :	Sadolin Crown Paints Limited PO Box 37, Crown House Hollins Road, Darwen Lancashire, BB3 0BG Tel: 01254 704951 crownpaint.co.uk	Crown Paints Ireland Ltd. Unit 8A Coolmine Central Porters Road, Coolmine Ind Est Dublin 15, D15 AX9A Tel: 00353 1 8164400
-------------------	---	--

1.4 Emergency telephone number

01254 704951 (08.00-17.00)

Contact Person:
Product SHE Information Manager
SHE@crownpaints.co.uk

Date of issue : 14 July 2021
Date of previous issue : 14 July 2021.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226
Skin Sens. 1, H317
STOT SE 3, H336
Aquatic Chronic 2, H411

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning
Hazard statements : H226 - Flammable liquid and vapour.
H317 - May cause an allergic skin reaction.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements :

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Do not get in eyes, on skin, or on clothing. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 2: Hazards identification

Prevention :	Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.
Response :	Collect spillage. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.
Storage :	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal :	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients :	hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 2-butanone oxime Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine 4,5-dichloro-2-n-octyl -4-isothiazolin-3-one

Supplemental label elements :

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	REACH #: 01-2119463258-33 EC: 265-150-3 (919-857-5) CAS: 64742-48-9	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1]
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5 (265-150-3) CAS: 64742-48-9	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1]
C10-C13 hydrocarbons (n-alkanes, isoalkanes, cyclics) <2% aromatics	REACH #: 01-2119457273-39 EC: 265-150-3 CAS: 64742-48-9	≥3 - ≤5	Asp. Tox. 1, H304 EUH066	[1]
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	REACH #: 01-2119457273-39 EC: 265-150-3 CAS: 64742-48-9	≥1 - ≤3	Asp. Tox. 1, H304	[1]
2-butanone oxime	REACH #: 01-2119539477-28 EC: 202-496-6 CAS: 96-29-7 Index: 616-014-00-0	≤0.3	Acute Tox. 4, H312 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351	[1]
strontium bis(2-ethylhexanoate)	REACH #: 01-2120783571-49 EC: 219-536-3 CAS: 2457-02-5	≤0.3	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361d	[1]
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	≤0.3	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	[1]
4,5-dichloro-2-n-octyl -4-isothiazolin-3-one	EC: 264-843-8 CAS: 64359-81-5	<0.25	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
See Section 16 for the full text of the H statements declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

SECTION 4: First aid measures

4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	No known significant effects or critical hazards.
Inhalation :	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact :	May cause an allergic skin reaction.
Ingestion :	Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact :	No specific data.
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact :	Adverse symptoms may include the following: irritation redness
Ingestion :	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used : waterjet.
-----------------------	--

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides metal oxide/oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not reuse container.

Never use pressure to empty; the container is not a pressure vessel. Always keep in the same material as the supply container. Good housekeeping standards and regular safe removal of waste materials will minimise risks of spontaneous combustion and other fire hazards. The Manual Handling Operations Regulations may apply to the handling of containers of this product. Packs with a volume content of 5 litres or more may be marked with a maximum gross weight. To assist employers the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity (relative density) value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

Storage : Do not store below the following temperature: 5 °C

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

All engineering control measures used to control exposure to hazardous substances must be selected, maintained, examined and tested to meet the requirements of the Control Of Substances Hazardous to Health regulations (COSHH). Similarly all personal protective equipment, including respiratory protective equipment, must be selected, issued and maintained to meet the requirements of COSHH. These requirements include the provision of any necessary information, instruction and training with regard to their use. Special precautions should be taken during surface preparation of pre-1960's paint surfaces over wood and metal as they may contain harmful lead.

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of solvent vapour below the relevant workplace exposure limits, suitable respiratory protection should be worn. (See personal protection below). Dry sanding, flame cutting and/ or welding of the dry paint film will give rise to dust and/ or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be worn.

Individual protection measures



General :	Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
Hygiene measures :	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Hand protection :	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances. Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice: Recommended: Silver Shield / Barrier / 4H gloves, nitrile rubber, polyvinyl alcohol (PVA), Viton® Short term exposure: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)
Body protection :	Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at the neck and wrists through contact with the product are avoided. Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product. Wear suitable protective clothing.
Respiratory protection :	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Odour :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	Testing not relevant or not possible due to nature of the product.
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 41°C (105.8°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Not available.
Upper/lower flammability or explosive limits :	1.4 - 7.6 vol %
Vapour pressure :	Testing not relevant or not possible due to nature of the product.
Vapour density :	Testing not relevant or not possible due to nature of the product.

SECTION 9: Physical and chemical properties

Relative density :	0.946 g/cm ³
Solubility(ies) :	
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Kinematic: 320 mm ² /s
Explosive properties :	Testing not relevant or not possible due to nature of the product.
Oxidising properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 43 %
Water % by weight :	Weighted average: 0 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

No specific data.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

The product has been assessed following the conventional method and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short term and long term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	LC50 Inhalation Vapour	Rat	8500 mg/m ³	4 hours
	LD50 Oral	Rat	>6 g/kg	-
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
C10-C13 hydrocarbons (n-alkanes, isoalkanes, cyclics) <2% aromatics	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapour	Rat	8500 mg/m ³	4 hours
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>6000 mg/kg	-
2-butanone oxime	LD50 Dermal	Rabbit	1001 mg/kg	-
	LD50 Oral	Rat	930 mg/kg	-
4,5-dichloro-2-n-octyl	LC50 Inhalation Dusts and mists	Rat	0.26 mg/l	4 hours

SECTION 11: Toxicological information

-4-isothiazolin-3-one			
-----------------------	--	--	--

Acute toxicity estimates

Route	ATE value
Inhalation (dusts and mists)	252.47 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics C10-C13 hydrocarbons (n-alkanes, isoalkanes, cyclics) <2% aromatics	Eyes - Mild irritant	Rabbit	-	100 microliters
	Skin - Mild irritant	Mammal - species unspecified	-	
	Eyes - Mild irritant	Mammal - species unspecified	-	
2-butanone oxime Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Eyes - Severe irritant	Rabbit	-	
	Skin - Mild irritant	Rabbit	-	
	Eyes - Mild irritant	Rabbit	-	

Mutagenic effects

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Teratogenic effects

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics 4,5-dichloro-2-n-octyl -4-isothiazolin-3-one	Category 3 Category 3 Category 3	- - -	Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics C10-C13 hydrocarbons (n-alkanes, isoalkanes, cyclics) <2% aromatics hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-butanone oxime strontium bis(2-ethylhexanoate)	Not supported -	- -	- -	- -

Sensitisation : Contains 2-butanone oxime, Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine, 4,5-dichloro-2-n-octyl -4-isothiazolin-3-one. May produce an allergic reaction.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Toxic to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute EC50 >100 mg/l	Algae	72 hours
4,5-dichloro-2-n-octyl -4-isothiazolin-3-one	Acute EC50 >10 mg/l	Daphnia	48 hours
	Acute EC50 >10 mg/l	Fish	96 hours
	Acute EC50 0.0057 mg/l	Daphnia	48 hours
	Acute LC50 0.048 mg/l	Algae	72 hours
	Acute LC50 0.014 mg/l	Fish	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	OECD 301F Ready Biodegradability - Manometric Respirometry Test	80 % - Readily - 28 days	-	-
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	OECD 301D Ready Biodegradability - Closed Bottle Test	22 % - Not readily - 28 days	-	-
4,5-dichloro-2-n-octyl -4-isothiazolin-3-one	OECD 301B Ready Biodegradability - CO2 Evolution Test	0.1 % - Not readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	-	Readily
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	-	-	Not readily
4,5-dichloro-2-n-octyl -4-isothiazolin-3-one	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-	10 - 2500	high
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	5 - 6.7	10 - 2500	high
C10-C13 hydrocarbons (n-alkanes, isoalkanes, cyclics) <2% aromatics	-	10 - 2500	high
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-	10 - 2500	high
2-butanone oxime	0.63	2.5 - 5.8	low
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	5.86	-	high
4,5-dichloro-2-n-octyl -4-isothiazolin-3-one	6.4	<13	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}): No known data available in our database.

Mobility: No known data available in our database.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimised wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue (EWC) : 08 01 11*






Packaging

Used containers, drained and/ or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with EWC code: 15 01 10*.

If mixed with other wastes, the above waste code may not be applicable.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT (hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)	3  	III	Yes.	Viscous liquid exception This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.2.3.1.5.2. Tunnel code (D/E)
IMDG Class	UN1263	PAINT (hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics). (4,5-dichloro-2-n-octyl-4-isothiazolin-3-one)	3  	III	Yes.	Emergency schedules F-E, S-A Viscous liquid exception This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.
IATA Class	UN1263	PAINT (hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)	3 	III	Yes.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorisation - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

SECTION 15: Regulatory information

This product is controlled under the Seveso III Directive.

Seveso category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b E2: Hazardous to the aquatic environment - Chronic 2

National regulations**15.2 Chemical safety assessment**

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H statements :

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful 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.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361d Suspected of damaging the unborn child.
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.
H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] :

Acute Tox. 2 ACUTE TOXICITY - Category 2
Acute Tox. 4 ACUTE TOXICITY - Category 4
Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1 ASPIRATION HAZARD - Category 1
Carc. 2 CARCINOGENICITY - Category 2
Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3
Repr. 2 REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1C SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1A SKIN SENSITISATION - Category 1A
Skin Sens. 1B SKIN SENSITISATION - Category 1B
STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
	On basis of test data Calculation method Calculation method Calculation method

Notice to reader

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.