

# SAFETY DATA SHEET

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

### 1.1 Product identifier

**Product name** : SIGMACOLOR SEMI GLOSS  
**Product code** : 0817  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

**Product use** : Consumer applications, Professional applications.  
**Use of the substance/  
mixture** : Coating.

### 1.3 Details of the supplier of the safety data sheet

Sigma Paint Saudi Arabia Ltd.  
 PO Box 7509, Dammam 31472  
 Saudi Arabia  
 Tel: 00966 38 47 31 00  
 Fax: 00966 38 47 17 34

**e-mail address of person responsible for this SDS** : [info @sigmapaints.com](mailto:info@sigmapaints.com)

**1.4 Emergency telephone number** : +966 1 38473100

## 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  
 STOT RE 2, H373  
 Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

#### Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : R10  
 R66  
 R52/53

**Physical/chemical hazards** : Flammable.

**Human health hazards** : Repeated exposure may cause skin dryness or cracking.

**Environmental hazards** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

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

### 2.2 Label elements

**SECTION 2: Hazards identification****Hazard pictograms****Signal word**

: Warning

**Hazard statements**

: Flammable liquid and vapour.  
 May cause damage to organs through prolonged or repeated exposure.  
 Harmful to aquatic life with long lasting effects.

**Precautionary statements****General**

: Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention**

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour.

**Response**

: Get medical attention if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing.

**Storage**

: Store in a well-ventilated place. Keep cool.

**Disposal**

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients**

: Solvent naphtha (petroleum), medium aliph.

**Supplemental label elements**

: Contains 2-butanone oxime. May produce an allergic reaction. Repeated exposure may cause skin dryness or cracking.

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

: Not applicable.

**Special packaging requirements****Containers to be fitted with child-resistant fastenings**

: Not applicable.

**Tactile warning of danger**

: Yes, applicable.

**2.3 Other hazards****Other hazards which do not result in classification**

: Prolonged or repeated contact may dry skin and cause irritation.

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

: Mixture

Product/ingredient name	Identifiers	% by weight	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Naphtha (petroleum), hydrotreated heavy : Nota(s) P	EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6	≥25 - <50	R10 Xn; R65 R66	Flam. Liq. 3, H226 Asp. Tox. 1, H304	[1]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≥10 - <25	Not classified.	Not classified.	[2]

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

calcium carbonate	REACH #: 01-2119486795-18 EC: 207-439-9 CAS: 471-34-1	≥5 - <10	Not classified.	Not classified.	[2]
Solvent naphtha (petroleum), medium aliph.	EC: 265-191-7 CAS: 64742-88-7	≥3 - <5	R10 Xn; R48/20, R65 R66, R67  N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Acute Tox. 4, H312	[1] [2]
2-butanone oxime	REACH #: 01-2119539477-28 EC: 202-496-6 CAS: 96-29-7 Index: 616-014-00-0	≥0.3 - <1	Carc. Cat. 3; R40  Xn; R21 Xi; R41 R43	Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351	[1] [2]
2-ethylhexanoic acid, zirconium salt	REACH #: 01-2119979088-21 EC: 245-018-1 CAS: 22464-99-9	≥0.1 - <0.3	Repr. Cat. 3; R63	Repr. 2, H361fd (Fertility and Unborn child) (oral)	[1] [2]

See Section 16 for  
the full text of the R-  
phrases declared  
above.

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

[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

Occupational exposure limits, if available, are listed in Section 8.

**SUB codes represent substances without registered CAS Numbers.**

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- 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 the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**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** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

**SECTION 4: First aid measures**

**Ingestion** : No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking

**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**

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**5.2 Special hazards arising from the substance or mixture**

**Hazards from the substance or mixture** : Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful 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 dioxide  
carbon monoxide  
metal oxide/oxides

**5.3 Advice for firefighters**

**Special precautions for fire-fighters** : 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : 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**

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**SECTION 6: Accidental release measures**

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**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). Water polluting material. May be harmful to the environment if released in large quantities.

**6.3 Methods and material for containment and cleaning up**

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Dispose of via a licensed waste disposal contractor. 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**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**7.1 Precautions for safe handling**

**Protective measures** : 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. Do not ingest. Avoid contact with eyes, skin and clothing. 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. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

**SECTION 7: Handling and storage****Advice on general occupational hygiene**

: 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. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities**

: Storage temperature: 5 to 35°C (41 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

**7.3 Specific end use(s)****Recommendations**

: Not available.

**Industrial sector specific solutions**

: Not available.

**SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**8.1 Control parameters****Occupational exposure limits**

titanium dioxide

**ACGIH TLV (United States, 4/2014).**

TWA: 10 mg/m<sup>3</sup> 8 hours.

calcium carbonate

**ACGIH TLV (United States).**

TWA: 3 mg/m<sup>3</sup> Form: Respirable

TWA: 10 mg/m<sup>3</sup> Form: Total dust

Solvent naphtha (petroleum), medium aliph.

**ACGIH TLV (United States).**

TWA: 400 ppm

2-butanone oxime

**IPEL (PPG).**

TWA: 3 ppm

STEL: 9 ppm

2-ethylhexanoic acid, zirconium salt

**ACGIH TLV (United States, 4/2014).**

STEL: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes.

TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.

**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.

**DNELs**

DNELs - Not available.

**PNECs**

PNECs - Not available.

## SECTION 8: Exposure controls/personal protection

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Chemical splash goggles.

#### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**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 workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

**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

#### Appearance

**Physical state** : Liquid.

**Colour** : Not available.

**Odour** : Not available.

**Odour threshold** : Not available.

**pH** : Not available.

**SECTION 9: Physical and chemical properties**

<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: >37.78°C
<b>Flash point</b>	: Closed cup: 41°C
<b>Evaporation rate</b>	: Not available.
<b>Material supports combustion.</b>	: Yes.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Upper/lower flammability or explosive limits</b>	: Greatest known range: Lower: 1.4% Upper: 7.6% (Naphtha (petroleum), hydrotreated heavy)
<b>Vapour pressure</b>	: Highest known value: 0.2 to 0.6 kPa (1.5 to 4.5 mm Hg) (at 20°C) (Solvent naphtha (petroleum), medium aliph.). Weighted average: 0.23 kPa (1.73 mm Hg) (at 20°C)
<b>Vapour density</b>	: Highest known value: 4 (Air = 1) (Solvent naphtha (petroleum), medium aliph.).
<b>Relative density</b>	: 1.2
<b>Solubility(ies)</b>	: Insoluble in the following materials: cold water.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: 60 - 100 s (ISO 6mm)
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
<b>10.5 Incompatible materials</b>	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
<b>10.6 Hazardous decomposition products</b>	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.



**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Vapour	Rat	8500 mg/m <sup>3</sup>	4 hours
titanium dioxide	LD50 Oral	Rat	>6 g/kg	-
calcium carbonate	LD50 Oral	Rat	>10 g/kg	-
Solvent naphtha (petroleum), medium aliph.	LD50 Oral	Rat	6450 mg/kg	-
	LD50 Dermal	Rabbit	>3000 mg/kg	-
2-butanone oxime	LD50 Oral	Rat	>5000 mg/kg	-
2-ethylhexanoic acid,	LD50 Oral	Rat	930 mg/kg	-
zirconium salt	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-

**Conclusion/Summary** : Not available.

**Acute toxicity estimates**

Not available.

**Irritation/Corrosion**

**Conclusion/Summary** : Not available.

**Sensitisation**

**Conclusion/Summary** : Not available.

**Mutagenicity**

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : Not available.

**Reproductive toxicity**

**Conclusion/Summary** : Not available.

**Teratogenicity**

**Conclusion/Summary** : Not available.

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Solvent naphtha (petroleum), medium aliph.	Category 3	Not applicable.	Narcotic effects

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Solvent naphtha (petroleum), medium aliph.	Category 1	Not determined	central nervous system (CNS)

**Aspiration hazard**

Product/ingredient name	Result
Naphtha (petroleum), hydrotreated heavy : Nota(s) P	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**SECTION 11: Toxicological information**

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Eye contact** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation** : No specific data.  
**Ingestion** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 dryness  
 cracking  
**Eye contact** : No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**Conclusion/Summary** : Not available.

**General** : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Other information** : Not available.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

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. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

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.

Contains 2-butanone oxime. May produce an allergic reaction.

**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

**Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-butanone oxime	0.63	5.01	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

**European waste catalogue (EWC)**

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Container	15 01 06 mixed packaging

**SECTION 13: Disposal considerations**

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	UN1263	UN1263	UN1263
<b>14.2 UN proper shipping name</b>	PAINT	PAINT	PAINT
<b>14.3 Transport hazard class(es)</b>	3	3	3
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	No.	No.	No.
<b>Marine pollutant substances</b>	Not applicable.	Not applicable.	Not applicable.

**Additional information**

**ADR/RID** : None identified.

**Tunnel code** : (D/E)

**IMDG** : None identified.

**IATA** : None identified.

**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.

**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 XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Other EU regulations**

<b>Product/ingredient name</b>	<b>Carcinogenic effects</b>	<b>Mutagenic effects</b>	<b>Developmental effects</b>	<b>Fertility effects</b>
2-butanone oxime	Carc. 2, H351	-	-	-
2-ethylhexanoic acid, zirconium salt	-	-	Repr. 2, H361d (Unborn child) (oral)	Repr. 2, H361f (Fertility) (oral)

**SECTION 15: Regulatory information**

**15.2 Chemical Safety Assessment** : No Chemical Safety Assessment has been carried out.

**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.  
 H304 May be fatal if swallowed and enters airways.  
 H312 Harmful in contact with skin.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H336 May cause drowsiness or dizziness.  
 H351 Suspected of causing cancer.  
 H361fd Suspected of damaging fertility if swallowed. Suspected of damaging the (Fertility and Unborn child) (oral) unborn child if swallowed.  
 H372 Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H411 Toxic to aquatic life with long lasting effects.  
 H412 Harmful to aquatic life with long lasting effects.
- Full text of classifications [CLP/GHS]** : Acute Tox. 4, H312 ACUTE TOXICITY (dermal) - Category 4  
 Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2  
 Aquatic Chronic 3, H412 LONG-TERM AQUATIC HAZARD - Category 3  
 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1  
 Carc. 2, H351 CARCINOGENICITY - Category 2  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3  
 Repr. 2, H361fd (Fertility and Unborn child) (oral) TOXIC TO REPRODUCTION (Fertility and Unborn child) (oral) - Category 2  
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1  
 STOT RE 1, H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1  
 STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
 STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
- Full text of abbreviated R phrases** : R10- Flammable.  
 R40- Limited evidence of a carcinogenic effect.  
 R63- Possible risk of harm to the unborn child.  
 R21- Harmful in contact with skin.  
 R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 R65- Harmful: may cause lung damage if swallowed.  
 R41- Risk of serious damage to eyes.

**SECTION 16: Other information**

R43- May cause sensitisation by skin contact.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapours may cause drowsiness and dizziness.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications [DSD/DPD]** : Carc. Cat. 3 - Carcinogen category 3  
Repr. Cat. 3 - Toxic to reproduction category 3  
Xn - Harmful  
Xi - Irritant  
N - Dangerous for the environment

**History**

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**Prepared by** : EHS

**Version** : 1

**Disclaimer**

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