

SAFETY DATA SHEET

Date of issue/Date of revision

: 16 December 2025

Version

: 1



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

1.1 Product identifier

Product name : SIGMADUR ONE ORANGE

Product code : 000010025237

Other means of identification

00481254

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

Product use : Professional applications, Used by spraying.

**Use of the substance/
mixture** : Coating.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL

Tweemontstraat 104

B-2100 Deurne

Belgium

Telephone +32-33606311

Fax +32-33606435

**e-mail address of person
responsible for this SDS** : Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

Supplier

+31 20 4075210

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 Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Carc. 1B, H350

Repr. 1B, H360D

STOT SE 3, H336

STOT RE 1, H372

Aquatic Chronic 3, H412

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

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SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.
Prevention	:	Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour.
Response	:	IF exposed or concerned: Get medical advice or attention.
Storage	:	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. P280, P210, P260, P308 + P313, P403 + P233, P501
Hazardous ingredients	:	naphtha (petroleum), hydrodesulphurized heavy Note P ; solvent naphtha (petroleum), medium aliph.; 2-ethylhexanoic acid, zirconium salt; butanone oxime and cobalt bis (2-ethylhexanoate)
Supplemental label elements	:	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Restricted to professional users.
<u>Special packaging requirements</u>		
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
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SECTION 2: Hazards identification

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : Based on available data, the classification criteria are not met.

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	Specific Conc. Limits, M-factors and ATEs	Type
naphtha (petroleum), hydrodesulphurized heavy Note P	EC: 265-185-4 CAS: 64742-82-1 Index: 649-330-00-2	≥10 - ≤14	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	-	[1]
stoddard solvent Nota(s) P	EC: 232-489-3 CAS: 8052-41-3 Index: 649-345-00-4	≥10 - ≤25	Eye Irrit. 2, H319 STOT RE 1, H372 (central nervous system (CNS)) Asp. Tox. 1, H304	-	[1] [2]
solvent naphtha (petroleum), medium aliph.	EC: 265-191-7 CAS: 64742-88-7 Index: 649-405-00-X	≥5.0 - ≤9.4	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1] [2]
2-ethylhexanoic acid, zirconium salt	REACH #: 01-2119979088-21 EC: 245-018-1 CAS: 22464-99-9 Index: 607-230-00-6	≥1.0 - ≤5.0	Repr. 1B, H360D	-	[1] [2]
Solvent naphtha (petroleum), heavy arom. Nota(s) P	REACH #: 01-2119451097-39 EC: 265-198-5 CAS: 64742-94-5 Index: 649-424-00-3	≤1.1	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1]
calcium bis (2-ethylhexanoate)	REACH #: 01-2119978297-19 EC: 205-249-0 CAS: 136-51-6 Index: 607-230-00-6	<0.30	Eye Dam. 1, H318 Repr. 1B, H360D	-	[1]
butanone oxime	REACH #: 01-2119539477-28 EC: 202-496-6	≤0.30	Acute Tox. 3, H301 Acute Tox. 4, H312 Skin Irrit. 2, H315	ATE [Oral] = 100 mg/kg ATE [Dermal] = 1100	[1]

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SECTION 3: Composition/information on ingredients

	CAS: 96-29-7 Index: 616-014-00-0		Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 1, H370 (upper respiratory tract) STOT SE 3, H336 STOT RE 2, H373 (blood system)	mg/kg	
cobalt bis (2-ethylhexanoate)	REACH #: 01-2119524678-29 EC: 205-250-6 CAS: 136-52-7 Index: 607-230-00-6	<0.30	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 1B, H360FD Aquatic Acute 1, H400 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	M [Acute] = 1	[1] [2]

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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. 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	: Causes serious eye irritation.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

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SECTION 4: First aid measures

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, 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. 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 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 oxides
nitrogen oxides
sulfur oxides
metal oxide/oxides

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SECTION 5: Firefighting measures

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.
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

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SECTION 7: Handling and storage

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. 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 only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.
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	: Store between the following temperatures: 0 to 35°C (32 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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)
See Section 1.2 for Identified uses.

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

Product/ingredient name	Exposure limit values
stoddard solvent Nota(s) P	ACGIH TLV (United States, 1/2025) TWA 8 hours: 100 ppm. TWA 8 hours: 525 mg/m³.
solvent naphtha (petroleum), medium aliph.	ACGIH TLV (United States) TWA: 400 ppm.
2-ethylhexanoic acid, zirconium salt	ACGIH TLV (United States, 1/2025) [Zirconium and compounds] A4. TWA 8 hours: 5 mg/m³ (as Zr).

English (GB)	Europe	7/20
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SECTION 8: Exposure controls/personal protection

cobalt bis(2-ethylhexanoate)	STEL 15 minutes: 10 mg/m³ (as Zr). ACGIH TLV (United States, 1/2025) [cobalt and inorganic compounds] A3. Skin sensitiser , Inhalation sensitiser. TWA 8 hours: 0.02 mg/m³ (as Co).
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Recommended monitoring procedures : 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/DMELs

Product/ingredient name	Exposure	Value
naphtha (petroleum), hydrodesulphurized heavy Note P	DNEL - Workers - Long term - Inhalation	Systemic 1286 mg/m³
	DNEL - General population - Long term - Inhalation	Systemic 0.41 mg/m³
	DNEL - Workers - Long term - Inhalation	Systemic 1.9 mg/m³
	DNEL - General population - Long term - Inhalation	Local 178.57 mg/m³
	DNEL - General population - Short term - Inhalation	Local 640 mg/m³
	DNEL - Workers - Long term - Inhalation	Local 837.5 mg/m³
	DNEL - Workers - Short term - Inhalation	Local 1066.67 mg/m³
	DNEL - General population - Short term - Inhalation	Systemic 570 mg/m³
	DNEL - Workers - Short term - Inhalation	Systemic 570 mg/m³
	DNEL - General population - Long term - Dermal	Systemic 12 mg/kg bw/day
	DNEL - General population - Long term - Oral	Systemic 21 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic 21 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Local 3.78 mg/cm²
	DNEL - Workers - Long term - Dermal	Local 7.56 mg/cm²
	DNEL - General population - Long term - Oral	Systemic 10.56 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Local 22 mg/m³
	DNEL - General population - Long term - Inhalation	Systemic 22 mg/m³
	DNEL - Workers - Short term - Dermal	Systemic 30 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic 40 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local 44 mg/m³
	DNEL - Workers - Long term - Inhalation	Systemic 44 mg/m³
	DNEL - General population - Short term - Oral	Systemic 50 mg/kg bw/day
	DNEL - General population - Short term - Inhalation	Local 55 mg/m³
	DNEL - General population - Short term - Inhalation	Systemic 55 mg/m³
	DNEL - Workers - Short term - Inhalation	Local 55 mg/m³
	DNEL - Workers - Short term - Inhalation	Systemic 55 mg/m³
	DNEL - General population - Short term - Dermal	Systemic 60 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic 80 mg/kg bw/day
stoddard solvent Nota (s) P	DNEL - Workers - Long term - Dermal	Local 7.56 mg/cm²
	DNEL - General population - Long term - Oral	Systemic 10.56 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Local 22 mg/m³
	DNEL - General population - Long term - Inhalation	Systemic 22 mg/m³
	DNEL - Workers - Short term - Dermal	Systemic 30 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic 40 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local 44 mg/m³
	DNEL - Workers - Long term - Inhalation	Systemic 44 mg/m³
	DNEL - General population - Short term - Oral	Systemic 50 mg/kg bw/day
	DNEL - General population - Short term - Inhalation	Local 55 mg/m³

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SECTION 8: Exposure controls/personal protection

2-ethylhexanoic acid, zirconium salt	DNEL - General population - Long term - Inhalation	Systemic	0.58 mg/m ³
	DNEL - Workers - Long term - Inhalation	Systemic	2.351 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	0.167 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic	0.167 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic	0.333 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Local	0.7 mg/m ³
	DNEL - Workers - Long term - Inhalation	Local	2.82 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	0.03 mg/kg bw/day
	DNEL - General population - Long term - Dermal	Systemic	0.28 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Local	0.69 mg/m ³
Solvent naphtha (petroleum), heavy arom. Nota(s) P	DNEL - General population - Long term - Inhalation	Systemic	0.69 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	0.95 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	2.31 mg/m ³
	DNEL - Workers - Long term - Inhalation	Systemic	2.31 mg/m ³
	DNEL - General population - Short term - Oral	Systemic	25.6 mg/kg bw/day
	DNEL - General population - Short term - Inhalation	Local	143.5 mg/m ³
	DNEL - Workers - Short term - Inhalation	Local	160.23 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	226 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	384 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	0.167 mg/kg bw/day
calcium bis (2-ethylhexanoate)	DNEL - General population - Long term - Dermal	Systemic	0.167 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic	0.333 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	0.58 mg/m ³
	DNEL - Workers - Long term - Inhalation	Systemic	2.351 mg/m ³
	DNEL - General population - Long term - Inhalation	Local	0.66 mg/m ³
	DNEL - Workers - Long term - Inhalation	Local	2.66 mg/m ³
	DMEL - General population - Long term - Oral	Systemic	1.6 µg/kg bw/day
	DMEL - Workers - Long term - Dermal	Systemic	4 µg/kg bw/day
	DMEL - General population - Long term - Inhalation	Systemic	4.82 µg/m ³
	DMEL - Workers - Long term - Inhalation	Systemic	28 µg/m ³
butanone oxime	DNEL - General population - Long term - Inhalation	Local	0.43 mg/m ³
	DNEL - Workers - Long term - Inhalation	Local	0.9 mg/m ³
	DNEL - General population - Long term - Inhalation	Local	37 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
cobalt bis (2-ethylhexanoate)	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³
	DNEL - General population - Long term - Oral	Systemic	175 µg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Local	235.1 µg/m ³

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail - Method	Value
butanone oxime cobalt bis(2-ethylhexanoate)	Fresh water - Assessment Factors	0.256 mg/l
	Sewage Treatment Plant - Assessment Factors	177 mg/l
	Fresh water - Sensitivity Distribution	0.6 µg/l
	Marine water - Sensitivity Distribution	2.36 µg/l
	Sewage Treatment Plant - Assessment Factors	0.37 mg/l
	Fresh water sediment - Sensitivity Distribution	9.5 mg/kg dwt
	Marine water sediment - Sensitivity Distribution	9.5 mg/kg dwt
	Soil - Sensitivity Distribution	10.9 mg/kg dwt

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Chemical splash goggles. Use eye protection according to EN 166.
- 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. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Gloves** : butyl 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.

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- 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. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3
- 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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state

Colour

Odour

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit

Flash point

Auto-ignition temperature

: Liquid.

: Orange.

: Aromatic.

: Not determined.

: >37.78°C

: Not determined. There are no data available on the mixture itself.

: Not available.

: Closed cup: 44°C

:

Ingredient name	°C	°F	Method
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide	>140	>284	

Decomposition temperature

pH

Viscosity

: Stable under recommended storage and handling conditions (see Section 7).

: Not applicable. insoluble in water.

: Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): >21 mm²/s

Solubility

Media	Result
cold water	Not soluble

Partition coefficient n-octanol/ water (log Pow)

Vapour pressure

: Not applicable.

:

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
stoddard solvent Nota(s) P	2	0.27				

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SECTION 9: Physical and chemical properties

Relative density	: 1.06
<u>Particle characteristics</u>	
Median particle size	: Not applicable.
9.2 Other information	
9.2.1 Information with regard to physical hazard classes	
Explosive properties	: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
Oxidising properties	: Product does not present an oxidizing hazard.
No additional information.	

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	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly.	
Causes serious eye irritation.	
Causes skin irritation.	
May cause an allergic skin reaction.	
May cause cancer.	
May damage the unborn child.	
May cause drowsiness or dizziness.	
Causes damage to organs through prolonged or repeated exposure.	

<u>Acute toxicity</u>		
Product/ingredient name	Result	Dose / Exposure
naphtha (petroleum), hydrodesulphurized heavy Note P	Rat - Oral - LD50	>5000 mg/kg
stoddard solvent Nota(s) P solvent naphtha (petroleum), medium aliph.	Rabbit - Dermal - LD50	>2000 mg/kg
	Rat - Oral - LD50	>5 g/kg
	Rat - Oral - LD50	>5000 mg/kg
2-ethylhexanoic acid, zirconium salt	Rabbit - Dermal - LD50	>3000 mg/kg
	Rabbit - Dermal - LD50	>5 g/kg
	Rat - Oral - LD50	>5 g/kg
	<u>Toxic effects</u> : Behavioral - Somnolence	

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SECTION 11: Toxicological information

Solvent naphtha (petroleum), heavy arom. Nota(s) P	(general depressed activity) Rat - Oral - LD50	>5 g/kg
butanone oxime	Rat - Inhalation - LC50 Dusts and mists Rabbit - Dermal - LD50	>5.2 mg/l [4 hours] 1100 mg/kg
cobalt bis(2-ethylhexanoate)	Rat - Oral - LD50 Rabbit - Dermal - LD50 <i>Toxic effects:</i> Skin After topical exposure - Primary irritation Rat - Oral - LD50	100 mg/kg >5 g/kg 3129 mg/kg

Acute toxicity estimates

Route	ATE value
Oral	50694.51 mg/kg

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Conclusion/Summary

Skin : Causes skin irritation.
Eyes : Causes serious eye irritation.
Respiratory : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Conclusion/Summary

Skin : May cause an allergic skin reaction.
Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

May cause cancer.

Reproductive toxicity

May damage the unborn child.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
naphtha (petroleum), hydrodesulphurized heavy Note P	Category 3	-	Narcotic effects
solvent naphtha (petroleum), medium aliph.	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), heavy arom. Nota(s) P	Category 3	-	Narcotic effects
butanone oxime	Category 1	-	upper respiratory tract
-	Category 3	-	Narcotic effects

Conclusion/Summary :

May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
naphtha (petroleum), hydrodesulphurized heavy Note P	Category 1	-	-
stoddard solvent Nota(s) P	Category 1	-	central nervous system (CNS)
solvent naphtha (petroleum), medium aliph.	Category 1	-	central nervous system (CNS)
butanone oxime	Category 2	-	blood system

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Conclusion/Summary :
Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard

Product/ingredient name	Result
naphtha (petroleum), hydrosulphurized heavy Note P	ASPIRATION HAZARD - Category 1
stoddard solvent Nota(s) P	ASPIRATION HAZARD - Category 1
solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), heavy arom. Nota(s) P	ASPIRATION HAZARD - Category 1

Conclusion/Summary :
Based on available data, the classification criteria are not met.
Information on likely routes of exposure : Not available.

Potential acute health effects

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Ingestion : Can cause central nervous system (CNS) depression.
Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced foetal weight
increase in foetal deaths
skeletal malformations
Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced foetal weight
increase in foetal deaths
skeletal malformations
Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure
Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.
Long term exposure

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Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

- General : Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity : No known significant effects or critical hazards.
- Reproductive toxicity : May damage the unborn child.
- Other information : Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

12.1 Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
2-ethylhexanoic acid, zirconium salt	Acute - LC50	Fish	>100 mg/l [96 hours]
Solvent naphtha (petroleum), heavy arom. Nota(s) P	NOEL - Fresh water	Daphnia	0.48 mg/l [21 days]

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Based on available data, the classification criteria are not met.

12.3 Bioaccumulative potential

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SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
naphtha (petroleum), hydrodesulphurized heavy Note P	-	10 to 2500	High
stoddard solvent Nota(s) P	3.16 to 7.06	-	High
Solvent naphtha (petroleum), heavy arom. Nota(s) P	2.8 to 6.5	-	High
butanone oxime	0.63	5.01 [OECD 305 C]	Low

12.4 Mobility in soil
Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
calcium bis(2-ethylhexanoate)	1.8	66.4852
butanone oxime	1.4	27.1042
cobalt bis(2-ethylhexanoate)	1.8	66.4852

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 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 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	:
European waste catalogue (EWC)	

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

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SECTION 13: Disposal considerations

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

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

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

Additional information

ADR/RID : None identified.
Tunnel code : (D/E)
ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.
IMDG : None identified.
IATA : None identified.

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 Maritime transport in bulk according to IMO instruments : Not applicable.

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SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

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

Product/ingredient name	Entry Number (REACH)
SIGMADUR ONE ORANGE	3 28 30
2-ethylhexanoic acid, zirconium salt butanone oxime	30 28

Labelling : Restricted to professional users.

Other EU regulations

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c

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
- PBT = Persistent, Bioaccumulative and Toxic
- vPvB = Very Persistent and Very Bioaccumulative
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- IMDG = International Maritime Dangerous Goods

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SECTION 16: Other information

IATA = International Air Transport Association

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
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. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) 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. 1B	CARCINOGENICITY - Category 1B
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 1	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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SECTION 16: Other information

Disclaimer

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