SAFETY DATA SHEET

Date of issue/Date of revision

: 23 October 2023

Version : 1.01



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

1.1 Product identifier	
Product name :	SIGMARINE 48 RAL 6010
Product code :	00310475
Product description :	
Product type :	Liquid.
Other means of : identification	Not available.
1.2 Relevant identified uses of t	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 :

: Product.Stewardship.EMEA@ppg.com

responsible for this SDS

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 UK CLP/GHS

Fam. Liq. 3, H226 Carc. 1B, H350 Repr. 1B, H360D STOT SE 3, H336 STOT RE 1, H372 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

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SECT	ION 2: Hazards identification	on	

SECTION 2: Hazards		
Hazard statements	:	 Fammable liquid and vapour. May cause drowsiness or dizziness. May cause cancer. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
Precautionary statements		
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. Avoid release to the environment. Do not breathe vapour.
Response	:	Collect spillage.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	P280, P210, P273, P260, P391, P501Repeated exposure may cause skin dryness or cracking.Contains butanone oxime. May produce an allergic reaction.Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Restricted to professional users.
Special packaging requirem	en	<u>ts</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.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

Μ	lixture			
3.2 Mixtures :				
Product/ingredient name	Identifiers	%	Classification	Туре
√ydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	REACH #: 01-2119458049-33 EC: 919-446-0 CAS: 64742-82-1	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5 CAS: 64742-48-9	≥10 - <20	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1]
English (GB)	United King	gdom (UK)		2/1

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SECTION 3: Compositio	n/information o	n ingredients		
Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, < 2% aromatics	REACH #: 01-2119457273-39 EC: 918-481-9 CAS: 64742-48-9	≥1.0 - ≤5.0	Asp. Tox. 1, H304 EUH066	[1]
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]
2-methylpentane-2,4-diol	EC: 203-489-0 CAS: 107-41-5	≤0.30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d	[1] [2]
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 CAS: 96-29-7 Index: 616-014-00-0	≤0.30	Acute Tox. 3, H301 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317	[1]

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.

Carc. 1B, H350 STOT SE 1, H370 (upper respiratory tract) STOT SE 3, H336 STOT RE 2, H373 (blood system) See Section 16 for the full text of the H statements declared

above.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

This mixture contains \geq 1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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 firs	t 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.

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SECTION 4: First	
Protection of first-aider	 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 symp	toms and effects, both acute and delayed
Potential acute health eff	ects
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs/sy	<u>imptoms</u>
Eye contact	: No specific data.
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 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 imm	nediate 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.

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , 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	: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard.
substance or mixture	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.

English	(GB)
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SECTION 5: Firefighting measures			
Hazardous combustion	Decomposition products may include the following mate	viale.	

products	carbon oxides metal oxide/oxides	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident 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.	if
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.	

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. Collect spillage.
6.3 Methods and material for	со	ntainment 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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.

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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). 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

8.1 Control parameters

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).

Occupational exposure limits

Product/ingredient name	Exposure limit values			
₽-ethylhexanoic acid, zirconium salt	EH40/2005 WELs (United Kingdom (UK), 1/2020). [zirconium			
	compounds as Zr]			
	STEL: 10 mg/m³, (as Zr) 15 minutes.			
	TWA: 5 mg/m³, (as Zr) 8 hours.			
2-methylpentane-2,4-diol	EH40/2005 WELs (United Kingdom (UK), 1/2020).			
	STEL: 123 mg/m ³ 15 minutes.			
	STEL: 25 ppm 15 minutes.			
	TWA: 123 mg/m ³ 8 hours.			
	TWA: 25 ppm 8 hours.			
English (GB) United Kingdom (UK) 6/16				

Conforms to Regulation	i (EC) No.	1907/2006	(REACH),	Annex II,	as amended by	y UK I	REACH	Regulation	SI 2019/758
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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices

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proced	ures	

itoring : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
₩ydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	DNEL	Long term Inhalation	330 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	44 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	71 mg/m³	General population	Systemic
	DNEL	Long term Dermal	26 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	26 mg/kg bw/day	General population	Systemic
Hydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	DNEL	Long term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	871 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General	Systemic
				population [Consumers]	
	DNEL	Long term Inhalation	185 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	125 mg/kg bw/day	General population	Systemic
2-ethylhexanoic acid, zirconium salt	DNEL	Long term Inhalation	2.5 mg/m³	[Consumers] General population	Systemic
	DNEL	Long term Oral	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	6.49 mg/kg bw/day	Workers	Systemic
2-methylpentane-2,4-diol	DNEL	Long term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	7.8 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	15 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	25 mg/m ³	General population	Local
	DNEL	Long term Dermal	42 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	44.4 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	49 mg/m ³	General population	Local
	DNEL	Long term Inhalation	49 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	98 mg/m³	Workers	Local
calcium bis(2-ethylhexanoate)	DNEL	Long term Oral	0.167 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.167 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.333 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.58 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	2.351 mg/m ³	Workers	Systemic
butanone oxime	DMEL	Long term Oral	1.6 µg/kg bw/day	General population	Systemic
	DMEL	Long term Dermal	4 µg/kg bw/day	Workers	Systemic
	DMEL	Long term Inhalation	4.82 µg/m³	General population	
	DMEL	Long term Inhalation	28 µg/m³	Workers	Systemic
	DNEL	Long term Inhalation	0.43 mg/m ³	General population	
	DNEL	Long term Inhalation	0.9 mg/m³	Workers	Local
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PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
butanone oxime	Fresh water Sewage Treatment Plant	· · · · ·	Assessment Factors Assessment Factors

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SECTION 8: Exposu	re 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 meas	<u>ures</u>
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 Skin protection	: Chemical splash goggles.
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. For prolonged or repeated handling, use the following type of gloves:
Gloves	Recommended: neoprene, polyvinyl alcohol (PVA), Viton® May be used: 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.
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. 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.

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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 physic	al an	d chemical properties
<u>Appearance</u>		
Physical state	1	Liquid.
Colour	:	Various
Odour	1	Aromatic.
Odour threshold	1	Not available.
Melting point/freezing point		May start to solidify at the following temperature: -43.77°C (-46.8°F) This is based on data for the following ingredient: 1,2,4-trimethylbenzene. Weighted average: -64.3°C (-83.7°F)
Initial boiling point and boiling range	:	>37.78°C (>100°F)
Flammability (solid, gas)	1	liquid
Upper/lower flammability or explosive limits		Greatest known range: Lower: 0.6% Upper: 7% (Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, < 2% aromatics)
Flash point	1	Closed cup: 38.5°C (101.3°F)
Auto-ignition temperature	1	210°C (410°F)
Decomposition temperature	1	
рН		Not applicable. Not applicable. insoluble in water.
Viscosity	1	Kinematic (40°C): >21 mm²/s
Solubility(ies)	1	
Media		Result

	WEUIA	Result
	cold water	Not soluble
N	liscible with water : N	No.

Partition coefficient: n-octanol/ : Not applicable. water

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Vapour pressure

	Vapour Pressure at 20°C			V	Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		0.3					
Relative density	: 1.09)	•				
Vapour density	: Hig	nest known	value: 4.4 (Air = 2	1) (nonane). V	Veighted av	verage: 4.16 (Air = 1)	
Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.				explosible mixture of			
Oxidising properties Particle characteristics	: Pro	duct does r	not present an oxid	lizing hazard.			
Median particle size	: Not	applicable.					

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.

English (GB) United Kingdom (UK) 9/	English (GB)	United Kingdom (UK)	9/16
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SECTION 10: Stabilit	y and reactivity
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	: Evolves hydrogen on contact with water. Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	LD50 Oral	Rat	>15000 mg/kg	-
Hydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, < 2% aromatics	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>6 g/kg	-
2-ethylhexanoic acid, zirconium salt	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
2-methylpentane-2,4-diol	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	3700 mg/kg	-
butanone oxime	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
GMARINE 48 RAL 6010	56327.2	N/A	N/A	N/A	N/A
2-methylpentane-2,4-diol	3700	N/A	N/A	N/A	N/A
butanone oxime	100	1100	N/A	N/A	N/A

Irritation/Corrosion

Conclusion/Summary Skin	Not available.There are no data available on the mixture itself.
Eyes Respiratory Sensitisation	There are no data available on the mixture itself.There are no data available on the mixture itself.
Conclusion/Summary Skin Respiratory	 There are no data available on the mixture itself. There are no data available on the mixture itself.
<u>Mutagenicity</u> Conclusion/Summary <u>Carcinogenicity</u>	: There are no data available on the mixture itself.

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SECTION 11: Toxicological information

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

Conclusion/Summary	There are no data available on the mixture itself.
Reproductive toxicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Teratogenicity	
Conclusion/Summary	1 () () () () () () () () () (

There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Category 3	-	Narcotic effects
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	Category 3	-	Narcotic effects
butanone oxime	Category 1	-	upper respiratory tract
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) butanone oxime	Category 1 Category 2	inhalation -	central nervous system (CNS) blood system

Aspiration hazard

Product/ingredient name	Result
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	ASPIRATION HAZARD - Category 1
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	ASPIRATION HAZARD - Category 1
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	ASPIRATION HAZARD - Category 1

Information on likely routes : Not available.

of exposure

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	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
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

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Skin contact	: Adverse symptoms may include the following: irritation 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 	

Delayed and immediate effec	<u>ts</u>	as well as chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
Conclusion/Summary	1	Not available.
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.
Carcinogenicity	1	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	1	No known significant effects or critical hazards.
Reproductive toxicity	1	May damage the unborn child.

Other information : Not available. SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure	
Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	Chronic NOEC 0.097 mg/l Fresh water	Daphnia - Daphnia	21 days	
Hydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	LC50 >1000 mg/l	Algae	72 hours	
2-ethylhexanoic acid, zirconium salt	Acute LC50 >100 mg/l	Fish	96 hours	
2-methylpentane-2,4-diol	EC50 >429 mg/l	Algae - Raphidocelis subcapitata	72 hours	
	EC50 5.41 mg/l	Daphnia - Daphnia magna	48 hours	
	LC50 8.51 mg/l	Fish - Gambusia affinis	96 hours	
	NOEC 429 mg/l	Algae - Raphidocelis subcapitata	72 hours	

Conclusion/Summary

: Not available.

12.2 Persistence and degradability

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Product/ingredient name	Test	Result	Dose	Inoculum
₩ydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	OECD 301 F 301F Ready Biodegradability - Manometric Respirometry Test	75 % - Readily - 28 days	-	-
Hydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	-	80 % - Readily - 28 days	-	-
2-methylpentane-2,4-diol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	81 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%) Hydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	-		Readily Readily
2-methylpentane-2,4-diol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
✓ydrocarbons, C9-C11, n- alkanes, isoalkanes, cyclics, <2% aromatics	-	10 to 2500	High
2-methylpentane-2,4-diol	0.58	- 5.01	Low
butanone oxime	0.63	5.01	Low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

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

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

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08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	
Waste code	Waste designation	
Waste catalogue		
Hazardous waste	: Yes.	
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.	

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	Waste catalogue	
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	ΙΑΤΑ
14.1 UN 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			111	111
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Naphtha (petroleum), hydrodesulfurized heavy, nonane)	Not applicable.

Additional information

ADR/RID	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Tunnel code	: (D/E)
ADN	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
IMDG	: The marine pollutant mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$.
ΙΑΤΑ	 The environmentally hazardous substance mark may appear if required by other transportation regulations.

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SECTION 14: Transport information

14.6 Special precautions for	: Transport within user's premises: always transport in closed containers that are
user	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 : Not available. according to IMO

instruments

SECTION 15: Regulatory information

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

UK (GB)/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.

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Restricted to professional users. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c E2

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = GB CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RBN = REACH Registration Number
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification	
Fam. Liq. 3, H226	On basis of test data	
Carc. 1B, H350	Calculation method	
Repr. 1B, H360D	Calculation method	
STOT SE 3, H336	Calculation method	
STOT RE 1, H372	Calculation method	
Aquatic Chronic 2, H411	Calculation method	

English (GB)

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SECTION 16: Other information

Full text of abbreviated H statements

⊮ 226	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.
H361d	Suspected of damaging 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.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
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. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
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

<u>History</u>

Date of issue/ Date of revision	: 23 October 2023
Date of previous issue	: 7 November 2022
Prepared by	: EHS
Version	: 1.01

Disclaimer

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