SAFETY DATA SHEET

Date of issue/Date of revision

: 14 May 2024

Version

: 1



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

1.1 Product identifier	
Product name	: SIGMAWELD 199 PASTE GREY
Product code	: 000001087036
Other means of identification	on la
00157924; 00160928; 00422	012; 00431832; 00477595
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
Sigma Paint Saudi Arabia Ltd PO Box 7509	
Dammam 31472	
Saudi Arabia	

Dammam 31472 Saudi Arabia Tel: 00966 138 47 31 00 Fax: 00966 138 47 17 34 e-mail address of person responsible for this SDS : ndpic@sfda.gov.sa

1.4 Emergency telephone : 00966 138473100 extn 1001 number

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. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 The product is classified as hazardous according to Regulation (EC) 1272/2008 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

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SECTION 2: Hazards	identification
Hazard pictograms	
	: Danger
Hazard statements	 Highly flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapour.
Response	: Collect spillage.
Storage	: Not applicable.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P261, P391, P501
Hazardous ingredients	 Fatty acids, C18-unsatd., trimers, compds. with oleylamine Fatty acids, tall-oil, compds. with oleylamine
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirem	<u>ients</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	: 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

3.2 Mixtures

: Mixture

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SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
zinc powder zinc dust (stabilised)	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6 Index: 030-001-01-9	≥25 - ≤50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - <20	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥5.0 - ≤10	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≥5.0 - ≤10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥1.0 - ≤4.0	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	-	[1] [2]
Fatty acids, C18-unsatd., trimers, compds. with oleylamine	REACH #: 01-2119971821-33 CAS: 147900-93-4	≤0.30	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT RE 2, H373 (gastrointestinal tract, immune system, liver) (oral) Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/ kg	[1]
Fatty acids, tall-oil, compds. with oleylamine	REACH #: 01-2119974148-28 EC: 288-315-1 CAS: 85711-55-3	≤0.30	Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT RE 2, H373 (gastrointestinal tract) (oral)	-	[1]
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SECTION 3: Composition/information on ingredients		
	See Section 16 for the full text of the H statements declared above.	
applicable, are classified as h	lients present which, within the current knowledge of the supplier and in the concentrations azardous to health or the environment, are PBTs, vPvBs or Substances of equivalent ed a workplace exposure limit and hence require reporting in this section.	
1] Substance classified with a 2] Substance with a workplace	a health or environmental hazard æ exposure limit	
mixture according to Note 10.		
	if available, are listed in Section 8.	
SECTION 4: First aid	d measures	
4.1 Description of first aid n	neasures	
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. 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 symptor	ns and effects, both acute and delayed	
Potential acute health effe	<u>ets</u>	
Eye contact	: Causes serious eye irritation.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symp	<u>otoms</u>	
Eye contact	: Adverse symptoms may include the following: pain or irritation	

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Specific treatments	: No specific treatment.
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	ediate medical attention and special treatment needed
Ingestion	: No specific data.
	cracking
	redness dryness
	irritation
Skin contact	: Adverse symptoms may include the following:
Inhalation	: No specific data.
	watering redness
	pain or irritation
Eye contact	: Adverse symptoms may include the following:
Over-exposure signs/sy	<u>mptoms</u>
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Inhalation	: No known significant effects or critical hazards.
Eye contact	: Causes serious eye irritation.
Potential acute health e	<u>fects</u>

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SECTION 5: Firefighting measures		

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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 fr	om the substance or mixture
Hazards from the substance or mixture	: Highly 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 very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides metal oxide/oxides
5.3 Advice for firefighters	
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

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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	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.

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SECTION 6: Accidental release measures

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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. 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.
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. 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.

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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

xylene Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016). [xylene (o, m & p isomers)] STEL: 651 mg/m ² 15 minutes. STEL: 150 ppm 15 minutes. TWX: 434 mg/m ² 8 hours. TWX: 434 mg/m ² 8 hours. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). [yylene (all isomers)] STEL: 150 ppm 15 minutes. TWX: 100 ppm 8 hours. STEL: 150 ppm 16 minutes. TWX: 100 ppm 8 hours. STEL: 150 ppm 16 minutes. TWX: 100 ppm 8 hours. STEL: 150 ppm 16 hours. STEL: 150 ppm 16 hours. STEL: 150 ppm 16 hours. TWX: 100 ppm 8 hours. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). TWX: 100 mg/m ¹ 8 hours. TWX: 100 mg/m ¹ 8 hours. Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2013). TWX: 100 mg/m ¹ 8 hours. STEL: 1553 mg/m ¹ 15 minutes. STEL: 1553 mg/m ¹ 15 minutes. STEL: 1553 mg/m ¹ 15 minutes. TWX: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.	Product/ingredient name	Exposure limit values
 values (United Arab Emirates, 7/2016). TWA: 10 mg/m³ 8 hours. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). TWA: 10 mg/m³ 8 hours. ACGIH TLV (United States, 7/2023). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016). TWA: 369 mg/m³ 8 hours. STEL: 553 mg/m³ 15 minutes. STEL: 553 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). STEL: 150 ppm 15 minutes. TWA: 309 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. TWA: 309 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. TWA: 309 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. TWA: 309 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. TWA: 309 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. TWA: 309 mg/m³ 8 hours. STEL: 100 ppm 8 hours. STEL: 100 ppm 8 hours. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. 	xylene	 values (United Arab Emirates, 7/2016). [xylene (o, m & p isomers)] STEL: 651 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). [xylene (all isomers)] STEL: 150 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. STEL: 651 mg/m³ 15 minutes. TWA: 434 mg/m³ 8 hours. STEL: 651 mg/m³ 15 minutes. TWA: 100 ppm 8 hours. ACGIH TLV (United States, 7/2023). [p-xylene and mixtures containing p-xylene] Ototoxicant.
1-methoxy-2-propanol Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016). TWA: 369 mg/m³ 8 hours. TWA: 309 mg/m³ 8 hours. TWA: 100 ppm 8 hours. STEL: 553 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. STEL: 150 ppm 15 minutes. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). STEL: 150 ppm 15 minutes. STEL: 553 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. STEL: 100 ppm 15 minutes. STEL: 100 ppm 15 minutes. STEL: 100 ppm 16 minutes. TWA: 100 ppm 8 hours. Zinc oxide Zinc oxide Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). TWA: 50 mg/m³ 8 hours. Zinc oxide Zinc oxide Cabinet Decree (12) of 2006 R	titanium dioxide	 values (United Arab Emirates, 7/2016). TWA: 10 mg/m³ 8 hours. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). TWA: 10 mg/m³ 8 hours. ACGIH TLV (United States, 7/2023). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale
Protection of Air from Pollution (United Arab Emirates, 5/2006).TWA: 5 mg/m³ 8 hours. Form: fumesSTEL: 10 mg/m³ 15 minutes. Form: fumesAbu Dhabi - OSHAD - Occupational air quality threshold limitvalues (United Arab Emirates, 7/2016).	1-methoxy-2-propanol	Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016).TWA: 369 mg/m³ 8 hours.TWA: 100 ppm 8 hours.STEL: 553 mg/m³ 15 minutes.STEL: 553 mg/m³ 15 minutes.Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006).STEL: 150 ppm 15 minutes.TWA: 369 mg/m³ 8 hours.STEL: 553 mg/m³ 15 minutes.TWA: 369 mg/m³ 8 hours.STEL: 553 mg/m³ 15 minutes.TWA: 100 ppm 8 hours.ACGIH TLV (United States, 7/2023).STEL: 369 mg/m³ 15 minutes.STEL: 369 mg/m³ 15 minutes.TWA: 100 ppm 15 minutes.TWA: 100 ppm 3 hours.ACGIH TLV (United States, 7/2023).STEL: 369 mg/m³ 15 minutes.TWA: 100 ppm 3 hours.ACGIH TLV (United States, 7/2023).STEL: 369 mg/m³ 15 minutes.TWA: 184 mg/m³ 8 hours.
	zinc oxide	Protection of Air from Pollution (United Arab Emirates, 5/2006). TWA: 5 mg/m ³ 8 hours. Form: fumes STEL: 10 mg/m ³ 15 minutes. Form: fumes Abu Dhabi - OSHAD - Occupational air quality threshold limit

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ethylbenzene	of the aerosol and fume TWA: 2 mg/m ³ 8 hours. Form: measured as respirable fraction of the aerosol and fume ACGIH TLV (United States, 7/2023). Notes: Respirable fraction; see Appendix C, paragraph C. ACGIH 2003 Adoption STEL: 10 mg/m ³ 15 minutes. Form: Respirable fraction TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016). STEL: 543 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 434 mg/m ³ 8 hours. Cabinet Decree (12) of 2006 Regarding Regulation Concerning
	 Protection of Air from Pollution (United Arab Emirates, 5/2006). STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. STEL: 543 mg/m³ 15 minutes. TWA: 100 ppm 8 hours. ACGIH TLV (United States, 7/2023). Ototoxicant. Notes: Substances for which there is a Biological Exposure Index or Indices 2002 Adoption. TWA: 20 ppm 8 hours.
Isopropyl alcohol	 Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016). TWA: 492 mg/m³ 8 hours. TWA: 200 ppm 8 hours. STEL: 984 mg/m³ 15 minutes. STEL: 400 ppm 15 minutes. Cabinet Decree (12) of 2006 Regarding Regulation Concerning Protection of Air from Pollution (United Arab Emirates, 5/2006). STEL: 500 ppm 15 minutes. TWA: 983 mg/m³ 8 hours. STEL: 1230 mg/m³ 15 minutes. TWA: 400 ppm 8 hours. ACGIH TLV (United States, 7/2023). Notes: Refers to Appendix A - Carcinogens. ACGIH 2003 Adoption STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours.
Zeolites	Abu Dhabi - OSHAD - Occupational air quality threshold limit values (United Arab Emirates, 7/2016). [aluminum metal and insoluble compounds] TWA: 1 mg/m ³ 8 hours. Form: measured as respirable fraction of the aerosol ACGIH TLV (United States, 7/2023). [Aluminum, metal and insoluble compounds] TWA: 1 mg/m ³ 8 hours. Form: Respirable fraction
Recommended monitoring : procedures	eference should be made to monitoring standards, such as the following: European tandard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure y inhalation to chemical agents for comparison with limit values and measurement trategy) European Standard EN 14042 (Workplace atmospheres - Guide for the oplication and use of procedures for the assessment of exposure to chemical and ological agents) European Standard EN 482 (Workplace atmospheres - General equirements for the performance of procedures for the measurement of chemical gents) Reference to national guidance documents for methods for the determination f hazardous substances will also be required

of hazardous substances will also be required.

8.2 Exposure controls

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Conforms to Regulation (EC) 2020/878	No	. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)
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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 measu	ires	
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 <u>Skin protection</u>	-	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.
Gloves	1	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.
Respiratory protection	:	
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

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Grey.
Odour	: Aromatic.
Odour threshold	: Not available.
Melting point/freezing point	: May start to solidify at the following temperature: -90°C (-130°F) This is based on data for the following ingredient: Isopropyl alcohol. Weighted average: -94.89°C (-138.8°F)

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SECTION 9: Physical a	nd	chemical pro	perties						
Initial boiling point and boiling range	:	>37.78°C							
Flammability	1	Not available.							
Upper/lower flammability or explosive limits	:	Greatest known rang	ge: Lower:	1.48%	Upper: 13.749	% (1-met	hoxy-2-pi	ropanol)	
Flash point	1	Closed cup: 20.4°C							
Auto-ignition temperature	:	290°C (554°F)							
Decomposition temperature		Stable under recommended storage and handling conditions (see Section 7).							
рН	:	Not applicable.							
Viscosity	:	Kinematic (40°C): >21 mm²/s							
Solubility(ies)	1								
Media		Result							
cold water		Not soluble							
Partition coefficient: n-octano	I/ :	Not applicable.							
Vapour pressure	:		Vapour Pressure at 20°C			Vapo	Vapour pressure at 50°C		
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
		Isopropyl alcohol	33.00268	4.4					
Evaporation rate	:	Highest known value butyl acetate	e: 1.7 (Isop	propyl al	cohol) Weigh	ed avera	ige: 0.860	compared w	
Relative density	1	2.12							
Vapour density		Highest known value							
Explosive properties	:	The product itself is vapour or dust with a			the formation	of an exp	olosible m	nixture of	
Oxidising properties	- 1	Product does not pre	esent an o	xidizing	hazard.				
Particle characteristics									
Median particle size	:	Not applicable.							
9.2 Other information									
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.

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SECTION 10: Stability and reactivity

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
Zinc powder - zinc dust (stabilized)	LC50 Inhalation Dusts and	Rat	>5.4 mg/l	4 hours
	mists		, C	
	LD50 Oral	Rat	>2000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapour	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
zinc oxide	LC50 Inhalation Dusts and	Rat	>5700 mg/m ³	4 hours
	mists			
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
Isopropyl alcohol	LC50 Inhalation Vapour	Rat	72600 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-
Fatty acids, C18-unsatd., trimers, compds. with oleylamine	LD50 Oral	Rat	>1570 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name		Result		Species	Score	Exposure	Observation
xylene		Skin - Moderate in	ritant F	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary		ł	Į		ļ	Į.	
Skin	: There are	no data available o	n the mi	ixture itself			
Eyes	: There are	no data available o	n the mi	ixture itself			
Respiratory	: There are	no data available o	n the mi	ixture itself			
Sensitisation							
Conclusion/Summary							
Skin	: There are	no data available c	on the m	nixture itsel	f.		
Respiratory	: There are no data available on the mixture itself.						
Mutagenicity							
Conclusion/Summary	: There are no data available on the mixture itself.						
Carcinogenicity							
Conclusion/Summary	: There are	no data available c	on the m	nixture itsel	f.		
Reproductive toxicity							
Conclusion/Summary							
Teratogenicity							
Conclusion/Summary	: There are	no data available c	on the m	nixture itsel	f.		
Product/ingredient name					Route of xposure		organs

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ECTION 11: Toxicol	ogical information
Information on likely routes of exposure	: Not available.
Potential acute health effect	<u>S</u>
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
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 phy	vsical, chemical and toxicological characteristics
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin contact	 Adverse symptoms may include the following: irritation redness dryness cracking
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness cts as well as chronic effects from short and long-term exposure
Short term exposure	to as well as chrome effects from short and fong-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 effe	
Not available.	
	- Not available
Conclusion/Summary	: Not available.
General	: 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	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.
Other information	: Not available.

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

Not available.

11.2.2 Other information

Not available.

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SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc powder - zinc dust (stabilized)	Acute EC50 0.106 mg/l	Algae -	72 hours
	Fresh water	Pseudokirchneriella subcapitata	
	Acute EC50 354 µg/l Fresh water	Daphnia - <i>Daphnia</i> magna	48 hours
	Chronic EC10 6.3 µg/l	Daphnia - <i>Daphnia</i> <i>magna</i> - Neonate	21 days
	Chronic LC10 185 µg/l Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	30 days
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>magna</i> - Neonate	48 hours
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh	Daphnia -	-
	water	Ceriodaphnia dubia	
Isopropyl alcohol	Acute EC50 10100 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>magna</i>	48 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum			
ethylbenzene	-	79 % - Readily - 10 day	S	-	-			
Conclusion/Summary : There are no data available on the mixture itself.								
Product/ingredient name		Aquatic half-life	Photo	olysis	Biodegradability			
xylene ethylbenzene		-	-		Readily Readily			

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene 1-methoxy-2-propanol ethylbonzone	3.12 <1 3.6	7.4 to 18.5 - 79.43	Low Low
ethylbenzene propan-2-ol	0.05	-	Low Low

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

SECTION 12: Ecological information

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

12.6 Endocrine disrupting properties

Not available.

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	: The classification of the product may meet the criteria for a 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.

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 sh taken when handling emptied containers that have not been cleaned or rin Empty containers or liners may retain some product residues. Vapour from residues may create a highly flammable or explosive atmosphere inside th Do not cut, weld or grind used containers unless they have been cleaned t internally. Avoid dispersal of spilt material and runoff and contact with soil, drains and sewers.	sed out. n product e container. noroughly	

SECTION 14: Transport information

	ADR/RID	I	MDG	ΙΑΤΑ	
14.1 UN number or ID number	UN1263	UN1263		UN1263	
14.2 UN proper shipping name	PAINT	PAINT		PAINT	
14.3 Transport hazard class(es)	3	3		3	
14.4 Packing group	II	II		II	
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SECTION 14: Tr	ansport informatio	n	
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Zinc powder - zinc dust (stabilized))	Not applicable.
≤5 Tunnel code : (D	e environmentally hazardou kg. /E)	us substance mark is not required w	
IATA : Th	•	not required when transported in size is substance mark may appear if rec	-
14.6 Special precautio user		n user's premises: always transpo re. Ensure that persons transporting dent or spillage.	
14.7 Transport in bulk according to IMO instruments	: Not applicable.		
SECTION 15: Re	gulatory informati	on	
		ns/legislation specific for the sub	stance or mixture
	<u>lo. 1907/2006 (REACH)</u>	La dia dia 2	
Annex XIV - LIST OF S	substances subject to aut	norisation	
None of the compon	ents are listed		
Substances of very			
None of the compon			
Annex XVII - Restric	tions : Not applicable.		
on the manufacture			
placing on the mark and use of certain	lei		

: No Chemical Safety Assessment has been carried out.

: Not applicable.

dangerous substances, mixtures and articles

Explosive precursors

15.2 Chemical safety

Not listed.

assessment

Other national and international regulations.

Ozone depleting substances (1005/2009/EU)

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SECTION 16: Other i	nformation		
Indicates information that I	as 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	 H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful 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. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. 		epeated exposure.
Full text of classifications [CLP/GHS]	: Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1 Skin Sens. 1A STOT RE 2 SPE EXF	JTE TOXICITY - Category 4 DRT-TERM (ACUTE) AQUATIO NG-TERM (CHRONIC) AQUATIO NG-TERM (CHRONIC) AQUATIO NG-TERM (CHRONIC) AQUATIO NG-TERM (CHRONIC) AQUATIO PIRATION HAZARD - Category RIOUS EYE DAMAGE/EYE IRR RIOUS EYE DAMAGE/EYE IRR MMABLE LIQUIDS - Category MMABLE LIQUIDS - Category N CORROSION/IRRITATION - N SENSITISATION - Category N SENSITISATION - Category ECIFIC TARGET ORGAN TOXI POSURE - Category 3	IC HAZARD - Category IC HAZARD - Category IC HAZARD - Category 1 ITATION - Category 1 ITATION - Category 2 2 3 Category 2 1 1A CITY - REPEATED
<u>History</u> Date of issue/ Date of revision	: 14 May 2024		
Date of previous issue	: No previous validation		
Prepared by	: EHS		
Version	: 1		
<u>Disclaimer</u>			

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