

SAFETY DATA SHEET

Date of issue/Date of revision

: 11 November 2025

Version : 2



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

1.1 Product identifier

Product name : SIGMAWELD 165 PASTE REDGREY 5010
Product code : 000010025955

Other means of identification

30013559

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. 2, H225

Eye Irrit. 2, H319

Repr. 2, H361d

STOT SE 3, H336

STOT RE 2, H373

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.

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 2: Hazards identification

2.2 Label elements

Hazard pictograms :



Signal word :

Danger

Hazard statements :

- Highly flammable liquid and vapour.
- Causes serious eye irritation.
- May cause drowsiness or dizziness.
- Suspected of damaging the unborn child.
- May cause damage to organs through prolonged or repeated exposure.
- Very toxic 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. Avoid release to the environment.

Response :

- Collect spillage.

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, P273, P391, P403 + P233, P501

Hazardous ingredients :

propan-2-ol; 1-methoxy-2-propanol; toluene and Quartz (SiO₂)

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 requirements

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.

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 :

None known.

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

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
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]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	-	[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]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	-	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≥1.0 - ≤5.0	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
crystalline silica, respirable powder (<10 microns)	EC: 238-878-4 CAS: 14808-60-7	≥1.0 - ≤5.0	STOT RE 1, H372 (inhalation)	-	[1] [2]
lead powder	EC: 231-100-4 CAS: 7439-92-1 Index: 082-013-00-1	<0.010	Repr. 1A, H360FD Lact., H362 STOT RE 1, H372 (blood, central nervous system (CNS), kidneys) (oral, inhalation) Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	Repr. 1A, H360D: C ≥ 0.03% STOT RE 1, H372: C ≥ 0.5% M [Acute] = 10 M [Chronic] = 100	[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

Code : 000010025955
SIGMAWELD 165 PASTE REDGREY 5010

Date of issue/Date of revision : 11 November 2025

SECTION 3: Composition/information on ingredients

[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.

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	: No known significant effects or critical hazards.
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: 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

Code : 000010025955	Date of issue/Date of revision	: 11 November 2025
SIGMAWELD 165 PASTE REDGREY 5010		

SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, 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 : 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

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

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 6: Accidental release measures

Small spill

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

Large spill

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

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
- : See Section 8 for information on appropriate personal protective equipment.
- : See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures

- : Put on appropriate personal protective equipment (see Section 8). 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.

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.

Code : 000010025955
SIGMAWELD 165 PASTE REDGREY 5010

Date of issue/Date of revision : 11 November 2025

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
propan-2-ol	ACGIH TLV (United States, 1/2025) A4. TWA 8 hours: 200 ppm. STEL 15 minutes: 400 ppm.
1-methoxy-2-propanol	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m ³ . STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m ³ .
toluene	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 192 mg/m ³ . TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m ³ . STEL 15 minutes: 100 ppm.
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 1/2025) [Silica, crystalline] A2. TWA 8 hours: 0.025 mg/m ³ . Form: Respirable fraction.
lead powder	EU Biological limit values (Europe, 3/2024) [lead and its inorganic compounds] OEL surveillance 8 hours: 0.015 mg/m ³ (lead). EU OEL (Europe, 3/2024) [lead and its inorganic compounds] Non-threshold reprotoxic substance.. TWA 8 hours: 0.03 mg/m ³ .

Biological exposure indices

Product/ingredient name	Exposure indices
lead powder	EU Biological limit values (Europe, 3/2024) [lead and its inorganic compounds] BEI surveillance: 30 µg/100 ml, lead [in blood]. BLV: 70 µg/100 ml, lead [in blood]. BEI surveillance - females of reproductive capacity: 4.5 µg/100 ml, lead [in blood].

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

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure		Value
propan-2-ol	DNEL - Workers - Long term - Inhalation	Systemic	500 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	888 mg/kg bw/day
	DNEL - General population - Long term - Oral	Systemic	26 mg/kg bw/day
	DNEL - General population - Short term - Oral	Systemic	51 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	89 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	178 mg/m ³
	DNEL - General population - Long term - Dermal	Systemic	319 mg/kg bw/day
	DNEL - Workers - Short term - Inhalation	Systemic	1000 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	33 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	43.9 mg/m ³
1-methoxy-2-propanol	DNEL - General population - Long term - Dermal	Systemic	78 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic	183 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Systemic	369 mg/m ³
	DNEL - Workers - Short term - Inhalation	Local	553.5 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	553.5 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	8.13 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Local	56.5 mg/m ³
	DNEL - General population - Long term - Inhalation	Systemic	56.5 mg/m ³
	DNEL - Workers - Long term - Inhalation	Local	192 mg/m ³
	DNEL - Workers - Long term - Inhalation	Systemic	192 mg/m ³
toluene	DNEL - General population - Long term - Dermal	Systemic	226 mg/kg bw/day
	DNEL - General population - Short term - Inhalation	Local	226 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	226 mg/m ³
	DNEL - Workers - Long term - Dermal	Systemic	384 mg/kg bw/day
	DNEL - Workers - Short term - Inhalation	Local	384 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	384 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	384 mg/m ³
	DNEL - General population - Short term - Inhalation	Local	384 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	384 mg/m ³
	DNEL - General population - Short term - Inhalation	Systemic	384 mg/m ³

PNECs

Product/ingredient name	Compartment Detail - Method	Value
Zinc powder zinc dust (stabilised)	Fresh water - Sensitivity Distribution	20.6 µg/l
	Marine water - Sensitivity Distribution	6.1 µg/l
	Sewage Treatment Plant - Assessment Factors	100 µg/l
	Fresh water sediment - Sensitivity Distribution	118 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	56.5 mg/kg dwt
	Soil - Sensitivity Distribution	35.6 mg/kg dwt
	Fresh water - Assessment Factors	140.9 mg/l
	Marine water - Assessment Factors	140.9 mg/l
	Secondary Poisoning	160 mg/kg
	Fresh water sediment	552 mg/kg dwt
propan-2-ol	Marine water sediment	552 mg/kg dwt
	Sewage Treatment Plant - Assessment Factors	2251 mg/l
	Soil	28 mg/kg dwt
	Fresh water - Assessment Factors	10 mg/l
	Marine water - Assessment Factors	1 mg/l
	Sewage Treatment Plant - Assessment Factors	100 mg/l
	Fresh water sediment - Equilibrium Partitioning	41.6 mg/kg
	Marine water sediment - Equilibrium Partitioning	4.17 mg/kg
1-methoxy-2-propanol		

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 8: Exposure controls/personal protection

toluene	Soil - Equilibrium Partitioning Fresh water - Sensitivity Distribution Marine water - Sensitivity Distribution Sewage Treatment Plant - Sensitivity Distribution Fresh water sediment - Equilibrium Partitioning Marine water sediment	2.47 mg/kg 0.68 mg/l 0.68 mg/l 13.61 mg/l 16.39 mg/kg dwt 16.39 mg/kg dwt
zinc oxide	Fresh water - Sensitivity Distribution Marine water - Sensitivity Distribution Fresh water sediment - Sensitivity Distribution Sewage Treatment Plant - Assessment Factors Marine water sediment - Assessment Factors Soil - Sensitivity Distribution	20.6 µg/l 6.1 µg/l 117 mg/kg dwt 52 µg/l 56.5 mg/kg dwt 35.6 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. 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

- 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

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

Recommended: nitrile rubber, 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.

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 8: Exposure controls/personal protection

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 : Liquid.

Colour : Various

Odour : Characteristic.

Melting point/freezing point : Not determined.

Boiling point or initial boiling point and boiling range : >37.78°C

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

Lower and upper explosion limit : Not available.

Flash point : Closed cup: 13°C

Auto-ignition temperature :

Ingredient name	°C	°F	Method
1-methoxy-2-propanol	270	518	

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

pH : Not applicable. insoluble in water.

Viscosity : 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) : Not applicable.

Vapour pressure :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
propan-2-ol	33.00268	4.4				

Relative density : 1.98

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 9: Physical and chemical properties

Particle characteristics

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 explosive 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 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.

Suspected of damaging fertility. Suspected of damaging the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Acute toxicity

Product/ingredient name	Result	Dose / Exposure
Zinc powder zinc dust (stabilised)	Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists Rat - Oral - LD50 <i>Toxic effects:</i> Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Somnolence (general depressed activity) Rabbit - Dermal - LD50 <i>Toxic effects:</i> Behavioral - Somnolence (general depressed activity) Behavioral - Irritability Gastrointestinal - Nausea or vomiting	>2000 mg/kg >5.4 mg/l [4 hours] 5045 mg/kg 12800 mg/kg
propan-2-ol	Rat - Inhalation - LC50 Vapour Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Vapour	72600 mg/m ³ [4 hours] 13 g/kg 5.2 g/kg >7000 ppm [6 hours]
1-methoxy-2-propanol		

Code : 000010025955 SIGMAWELD 165 PASTE REDGREY 5010	Date of issue/Date of revision : 11 November 2025
SECTION 11: Toxicological information	
toluene	Rat - Oral - LD50 Rat - Inhalation - LC50 Vapour
zinc oxide	Rat - Oral - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists

Acute toxicity estimates

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

Irritation/Corrosion

Conclusion/Summary

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

Eyes : Causes serious eye irritation.

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

Respiratory or skin sensitization

Conclusion/Summary

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

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	-	Narcotic effects
1-methoxy-2-propanol	Category 3	-	Narcotic effects
toluene	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
toluene crystalline silica, respirable powder (<10 microns) lead powder	Category 2 Category 1 Category 1	- inhalation oral, inhalation	- - blood, central nervous system (CNS), kidneys

Conclusion/Summary :

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Product/ingredient name	Result
toluene	ASPIRATION HAZARD - Category 1

Conclusion/Summary :

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

Information on likely routes of exposure : Not available.

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 11: Toxicological information

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 : No known significant effects or critical hazards.

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:
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

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 : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging the unborn child.

Other information : 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 11: Toxicological information

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
Zinc powder zinc dust (stabilised)	Acute - EC50 - Fresh water Chronic - EC10	Algae - <i>Pseudokirchneriella subcapitata</i> Daphnia - Water flea - <i>Daphnia magna</i> - Neonate Daphnia - Water flea - <i>Daphnia magna</i>	0.106 mg/l [72 hours] 6.3 µg/l [21 days] 354 µg/l [48 hours]
	Acute - EC50 - Fresh water Chronic - LC10 - Fresh water	Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i> - Juvenile (Fledgling, Hatchling, Weanling)	185 µg/l [30 days]
	Chronic - EC10 - Fresh water	Algae - Green algae - <i>Raphidocelis subcapitata</i> - Exponential growth phase	27.3 µg/l [72 hours]
propan-2-ol	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	10.1 g/l [48 hours]
1-methoxy-2-propanol	Acute - LC50 - Fresh water	Fish - Goldfish	>4500 mg/l [96 hours]
toluene	Acute - LC50	Daphnia - Daphnia	23300 mg/l [48 hours]
	EC50	Daphnia	3.78 mg/l [48 hours]
zinc oxide	LC50	Fish	5.5 mg/l [96 hours]
	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	0.481 mg/l [48 hours]
	Acute - EC50	Algae	0.17 mg/l [72 hours]
	Chronic - NOEC - Fresh water	Algae	0.017 mg/l [72 hours]
lead powder	Acute - LC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	0.594 mg/l [48 hours]
	Acute - EC50 - Fresh water	Algae - Green algae - <i>Raphidocelis subcapitata</i> - Exponential growth phase	20.5 µg/l [72 hours]
	Chronic - EC10 - Fresh water	Algae - Green algae - <i>Raphidocelis subcapitata</i> - Exponential growth phase	3.9 µg/l [72 hours]

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

12.2 Persistence and degradability

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

Code : 000010025955 SIGMAWELD 165 PASTE REDGREY 5010	Date of issue/Date of revision : 11 November 2025
--	--

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
propan-2-ol	0.05	-	Low
1-methoxy-2-propanol	<1	-	Low
toluene	2.73	90	Low

12.4 Mobility in soil

Product/ingredient name	logK _{oc}	K _{oc}
propan-2-ol	0.54	3.4364
1-methoxy-2-propanol	1	10.447
toluene	2.1	117.115

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

<u>Product</u>	
<u>Methods of disposal</u>	<ul style="list-style-type: none">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.
<u>Hazardous waste</u>	<ul style="list-style-type: none">The classification of the product may meet the criteria for a hazardous waste.
<u>Packaging</u>	
<u>Methods of disposal</u>	<ul style="list-style-type: none">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.

Code : 000010025955

Date of issue/Date of revision

: 11 November 2025

SIGMAWELD 165 PASTE REDGREY 5010

SECTION 13: Disposal considerations

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

SECTION 14: Transport information

	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	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Zinc powder - zinc dust (stabilized))	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 ≤ 5 L or ≤ 5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

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.

Code : 000010025955
SIGMAWELD 165 PASTE REDGREY 5010

Date of issue/Date of revision : 11 November 2025

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

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	lead powder	Recommended	11th recommendation	4/12/2023

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)
SIGMAWELD 165 PASTE REDGREY 5010	3
toluene	48
lead powder	72

Labelling : Not applicable.

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
E1

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

Code : 000010025955
SIGMAWELD 165 PASTE REDGREY 5010

Date of issue/Date of revision : 11 November 2025

SECTION 16: Other information

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

IATA = International Air Transport Association

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H360FD	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H362	May cause harm to breast-fed children.
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.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - 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
Lact.	REPRODUCTIVE TOXICITY - Effects on or via lactation
Repr. 1A	REPRODUCTIVE TOXICITY - Category 1A
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

History

Date of issue/ Date of revision : 11 November 2025

Date of previous issue : 30 July 2025

Prepared by : EHS

Version : 2

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.