

SAFETY DATA SHEET



Date of issue/Date of revision

: 31 August 2026

Version

: 1.06

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

1.1 Product identifier

Product name : SIGMAWELD 165 PASTE REDBROWN
Product code : 00251050
Product type : Liquid.
Other means of identification : Not available.

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

Product use : 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 UK CLP/GHS

Fam. Liq. 2, H225
Eye Irrit. 2, H319
Repr. 2, H361d
STOT RE 1, H372
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

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

Code : 00251050 **Date of issue/Date of revision** : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN

SECTION 3: Composition/information on ingredients

toluene	01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0 REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥1.0 - ≤5.0	Eye Irrit. 2, H319 STOT SE 3, H336 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 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
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 (M=10) Aquatic Chronic 1, H410 (M=100) See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. 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

Code : 00251050	Date of issue/Date of revision : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN	

SECTION 4: First aid measures

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
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 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 protective actions 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.

Code : 00251050	Date of issue/Date of revision : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN	

SECTION 5: Firefighting measures

- 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 British standard BS 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. Do not breathe vapour. Put on appropriate personal protective equipment. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
- 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.
- 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.

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

Code : 00251050	Date of issue/Date of revision : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN	
SECTION 7: Handling and storage	

Advice on general occupational hygiene	discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. : 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.
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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
ethanol	EH40/2005 WELs (United Kingdom (UK), 1/2020) TWA 8 hours: 1000 ppm. TWA 8 hours: 1920 mg/m³.
crystalline silica, respirable powder (<10 microns)	EH40/2005 WELs (United Kingdom (UK), 1/2020) [silica, respirable crystalline] Carc. TWA 8 hours: 0.1 mg/m³. Form: Respirable fraction.
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed through skin. STEL 15 minutes: 560 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 375 mg/m³. TWA 8 hours: 100 ppm.
propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020) STEL 15 minutes: 1250 mg/m³. STEL 15 minutes: 500 ppm. TWA 8 hours: 999 mg/m³. TWA 8 hours: 400 ppm.
toluene	EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed through skin. STEL 15 minutes: 384 mg/m³. TWA 8 hours: 191 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm.
lead powder	EH40/2005 WELs (United Kingdom (UK), 1/2020) Carc. TWA 8 hours: 0.15 mg/m³.

Biological exposure indices

Code : 00251050

Date of issue/Date of revision

: 31 August 2026

SIGMAWELD 165 PASTE REDBROWN

SECTION 8: Exposure controls/personal protection

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: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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

ethanol	DNEL - Workers - Long term - Inhalation	Systemic	380 mg/m ³
	DNEL - General population - Long term - Oral	Systemic	87 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Systemic	114 mg/m ³
	DNEL - General population - Long term - Dermal	Systemic	206 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Systemic	343 mg/kg bw/day
	DNEL - General population - Short term - Inhalation	Local	950 mg/m ³
1-methoxy-2-propanol	DNEL - Workers - Short term - Inhalation	Local	1900 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
	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
propan-2-ol	DNEL - Workers - Short term - Inhalation	Local	553.5 mg/m ³
	DNEL - Workers - Short term - Inhalation	Systemic	553.5 mg/m ³
	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
toluene	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	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
	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

Code : 00251050

Date of issue/Date of revision

: 31 August 2026

SIGMAWELD 165 PASTE REDBROWN

SECTION 8: Exposure controls/personal protection**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
ethanol	Soil - Sensitivity Distribution	35.6 mg/kg dwt
	Fresh water - Assessment Factors	0.96 mg/l
	Marine water - Assessment Factors	0.79 mg/l
	Sewage Treatment Plant - Assessment Factors	580 mg/l
	Fresh water sediment - Equilibrium Partitioning	3.6 mg/kg dwt
1-methoxy-2-propanol	Marine water sediment - Equilibrium Partitioning	2.9 mg/kg dwt
	Soil - Assessment Factors	0.63 mg/kg dwt
	Fresh water - Assessment Factors	10 mg/l
	Sewage Treatment Plant - Assessment Factors	100 mg/l
	Fresh water sediment - Equilibrium Partitioning	41.6 mg/kg dwt
propan-2-ol	Marine water sediment - Equilibrium Partitioning	4.17 mg/kg dwt
	Soil - Equilibrium Partitioning	2.47 mg/kg dwt
	Fresh water - Assessment Factors	140.9 mg/l
	Marine water - Assessment Factors	140.9 mg/l
	Secondary Poisoning	160 mg/kg
toluene	Fresh water sediment	552 mg/kg dwt
	Marine water sediment	552 mg/kg dwt
	Sewage Treatment Plant - Assessment Factors	2251 mg/l
	Soil	28 mg/kg dwt
	Fresh water - Sensitivity Distribution	0.68 mg/l
zinc oxide	Marine water - Sensitivity Distribution	0.68 mg/l
	Sewage Treatment Plant - Sensitivity Distribution	13.61 mg/l
	Fresh water sediment - Equilibrium Partitioning	16.39 mg/kg dwt
	Marine water sediment	16.39 mg/kg dwt
	Fresh water - Sensitivity Distribution	20.6 µg/l
	Marine water - Sensitivity Distribution	6.1 µg/l
	Fresh water sediment - Sensitivity Distribution	117 mg/kg dwt
	Sewage Treatment Plant - Assessment Factors	52 µg/l
	Marine water sediment - Assessment Factors	56.5 mg/kg dwt
	Soil - Sensitivity Distribution	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.

Skin protection**Hand protection**

:

Code : 00251050	Date of issue/Date of revision : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN	

SECTION 8: Exposure controls/personal 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: butyl rubber, 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.

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	: Brownish-red.
Odour	: Aromatic.
Odour threshold	: Not available.
Melting point/freezing point	:
Initial boiling point and boiling range	: >37.78°C (>100°F)
Flammability (solid, gas)	: liquid
Upper/lower flammability or explosive limits	: Not available.
Flash point	: Closed cup: 13°C (55.4°F)
Auto-ignition temperature	:

Code	: 00251050	Date of issue/Date of revision	: 31 August 2026
SIGMAWELD 165 PASTE REDBROWN			

SECTION 9: Physical and chemical properties

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

pH : Not applicable.
Not applicable. insoluble in water.

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

Solubility(ies) :

Media	Result
cold water	Not soluble

Miscible with water : No.

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

Vapour pressure :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
 Ethanol	42.94865	5.7				

Relative density : 2

Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

Oxidising properties : Product does not present an oxidizing hazard.

Particle characteristics

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.
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	

Code : 00251050

Date of issue/Date of revision

: 31 August 2026

SIGMAWELD 165 PASTE REDBROWN

SECTION 11: Toxicological information

Product/ingredient name	Result	Dose / Exposure
zinc powder zinc dust (stabilised)	Rat - Oral - LD50	>2000 mg/kg
ethanol	Rat - Inhalation - LC50 Dusts and mists	>5.4 mg/l [4 hours]
	Rat - Oral - LD50	7 g/kg
	<i>Toxic effects:</i> Liver - Other changes Blood - Changes in serum composition (e.g., TP, bilirubin, cholesterol) Enzyme inhibition, induction, or change in blood or tissue levels - Phosphatases	
1-methoxy-2-propanol	Rat - Dermal - LD50	17100 mg/kg
	Rat - Inhalation - LC50 Vapour	124700 mg/m ³ [4 hours]
	Rabbit - Dermal - LD50	13 g/kg
	Rat - Oral - LD50	5.2 g/kg
propan-2-ol	Rat - Inhalation - LC50 Vapour	>7000 ppm [6 hours]
	Rat - Oral - LD50	5045 mg/kg
	<i>Toxic effects:</i> Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Somnolence (general depressed activity)	
	Rabbit - Dermal - LD50	12800 mg/kg
	<i>Toxic effects:</i> Behavioral - Somnolence (general depressed activity) Behavioral - Irritability Gastrointestinal - Nausea or vomiting	
toluene	Rat - Inhalation - LC50 Vapour	72600 mg/m ³ [4 hours]
	Rat - Oral - LD50	5580 mg/kg
	Rat - Inhalation - LC50 Vapour	49 g/m ³ [4 hours]
zinc oxide	Rat - Oral - LD50	>5000 mg/kg
	Rat - Dermal - LD50	>2000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	>5700 mg/m ³ [4 hours]

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)
ethanol	7000	17100	N/A	124.7	N/A
1-methoxy-2-propanol	5200	13000	N/A	N/A	N/A
propan-2-ol	5045	12800	N/A	72.6	N/A
toluene	5580	N/A	N/A	49	N/A

Irritation/Corrosion**Conclusion/Summary**

: Not available.

Skin

: There are no data available on the mixture itself.

Eyes

: There are no data available on the mixture itself.

Respiratory

: There are no data available on the mixture itself.

Sensitisation**Conclusion/Summary****Skin**

: There are no data available on the mixture itself.

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 on the mixture itself.

Reproductive toxicity**Conclusion/Summary**

: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Code : 00251050 **Date of issue/Date of revision** : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
1-methoxy-2-propanol	Category 3	-	Narcotic effects
propan-2-ol	Category 3	-	Narcotic effects
toluene	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
toluene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : Defatting to the skin. May cause skin dryness and irritation.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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

Inhalation : Adverse symptoms may include the following:
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

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

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Code : 00251050

Date of issue/Date of revision

: 31 August 2026

SIGMAWELD 165 PASTE REDBROWN

SECTION 11: Toxicological information**Potential immediate effects** : Not available.**Potential delayed effects** : Not available.**Potential chronic health effects****Conclusion/Summary** : 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** : 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**

Not available.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Result	Species	Dose / Exposure
Zinc powder zinc dust (stabilised)	Acute - EC50 - Fresh water	Algae - <i>Pseudokirchneriella subcapitata</i>	0.106 mg/l [72 hours]
	Chronic - EC10	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	6.3 µg/l [21 days]
	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	354 µg/l [48 hours]
	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]
ethanol	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	7640 mg/l [48 hours]
1-methoxy-2-propanol	Acute - LC50 - Fresh water	Fish - Goldfish	>4500 mg/l [96 hours]
propan-2-ol	Acute - LC50	Daphnia - Daphnia	23300 mg/l [48 hours]
	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	10.1 g/l [48 hours]
toluene	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]
lead powder	Chronic - NOEC - Fresh water	Algae	0.017 mg/l [72 hours]
	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 : Not available.**12.2 Persistence and degradability****Conclusion/Summary** : Not available.

Code : 00251050 **Date of issue/Date of revision** : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN

SECTION 12: Ecological information

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

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
ethanol	-0.35	-	Low
1-methoxy-2-propanol	<1	-	Low
Isopropyl alcohol	0.05	-	Low
toluene	2.73	90	Low

12.4 Mobility in soil

Soil/water partition coefficient : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Zinc powder zinc dust (stabilised)	No	No	No	No	No	No	No
ethanol	No	N/A	N/A	No	N/A	N/A	N/A
Quartz (SiO ₂)	No	No	No	No	No	No	No
1-methoxy-2-propanol	No	N/A	N/A	No	N/A	N/A	N/A
propan-2-ol	No	N/A	N/A	No	N/A	N/A	N/A
toluene	No	N/A	No	Yes	No	N/A	No
zinc oxide	No	No	No	No	No	No	No
lead powder	N/A	N/A	N/A	Yes	N/A	N/A	N/A

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

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

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

Hazardous waste

Waste catalogue

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.

Code : 00251050 **Date of issue/Date of revision** : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN

SECTION 13: Disposal considerations

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	IATA
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	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)	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 Transport in bulk according to IMO instruments : Not available.

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

Code : 00251050 **Date of issue/Date of revision** : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN

SECTION 15: Regulatory information

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	lead	Candidate	-	6/27/2018

Explosive precursors : Not applicable.

Ozone depleting substances

Not listed.

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

Product/ingredient name	Entry Number (REACH)
SIGMAWELD 165 PASTE REDBROWN	3
toluene	48
lead powder	72

Labelling : Not applicable.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c E1

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
crystalline silica, respirable powder (<10 microns)	EH40/2005 WELs	silica, respirable crystalline	Carc	-
lead powder	EH40/2005 WELs	-	Carc	-

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
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
 Flam. Liq. 2, H225 Eye Irrit. 2, H319 Repr. 2, H361d STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

Code : 00251050	Date of issue/Date of revision : 31 August 2026
SIGMAWELD 165 PASTE REDBROWN	

SECTION 16: Other information

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

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

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Disclaimer

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