SAFETY DATA SHEET

Date of issue/Date of revision : 1 July 2024 Version : 1.03



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

1.1 Product identifier

Product name : SIGMAWELD 165 PASTE REDGREY

Product code : 00153251
Product type : Liquid.
Other means of : Not available.

identification

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

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

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 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

English (GB) United Kingdom (UK) 1/16

SIGMAWELD 165 PASTE REDGREY

SECTION 2: Hazards identification

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.

Precautionary statements

Prevention: Wear protective gloves, protective clothing and eye or face protection. Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Avoid release to the environment. Do not breathe vapour.

Response : Collect spillage.
Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

P280, P210, P273, P260, P391, P501

Supplemental label

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and : Not applicable.

articles

Special packaging requirements

Containers to be fitted

with child-resistant fastenings

: Not applicable.

iasteilligs

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

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

vPvB.

Other hazards which do not result in classification

: Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|------------------------------------|----------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------|---------|
| zínc 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 (M=1) Aquatic Chronic 1, H410 (M=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 | ≥1.0 - ≤5.0 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 | [1] [2] |

English (GB) United Kingdom (UK) 2/16

SIGMAWELD 165 PASTE REDGREY

SECTION 3: Composition/information on ingredients

| | 1 | | | 1 1 |
|---------------------------------------|------------------------------|-------------|-------------------------------------------------------------------------------|---------|
| | EC: 203-625-9 | | Repr. 2, H361d | |
| | CAS: 108-88-3 | | STOT SE 3, H336 | |
| | Index: 601-021-00-3 | | STOT RE 2, H373 | |
| | | | Asp. Tox. 1, H304 | |
| zinc oxide | REACH #: 01-2119463881-32 | ≥1.0 - ≤5.0 | Aquatic Acute 1, H400 (M=1) | [1] |
| | EC: 215-222-5 | | Aquatic Chronic 1, | |
| | CAS: 1314-13-2 | | H410 (M=1) | |
| | Index: 030-013-00-7 | | | |
| crystalline silica, respirable powder | EC: 238-878-4 | ≥1.0 - ≤5.0 | STOT RE 1, H372 | [1] [2] |
| (<10 microns) | CAS: 14808-60-7 | | (inhalation) | |
| | | | See Section 16 for the full text of the H statements declared above. | |

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.

: 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: Defatting to the skin. May cause skin dryness and irritation.

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

English (GB) United Kingdom (UK) 3/16

SIGMAWELD 165 PASTE REDGREY

SECTION 4: First aid measures

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation dryness cracking

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

4.3 Indication of any 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.

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.

English (GB) United Kingdom (UK) 4/16

SIGMAWELD 165 PASTE REDGREY

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

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 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.

English (GB) United Kingdom (UK) 5/16

SIGMAWELD 165 PASTE REDGREY

SECTION 7: Handling and storage

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 wellventilated 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 |
|-----------------------------------------------------|--------------------------------------------------------|
| propan-2-ol | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| | STEL: 1250 mg/m³ 15 minutes. |
| | STEL: 500 ppm 15 minutes. |
| | TWA: 999 mg/m³ 8 hours. |
| | TWA: 400 ppm 8 hours. |
| 1-methoxy-2-propanol | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 560 mg/m³ 15 minutes. |
| | STEL: 150 ppm 15 minutes. |
| | TWA: 375 mg/m³ 8 hours. |
| | TWA: 100 ppm 8 hours. |
| toluene | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 384 mg/m³ 15 minutes. |
| | STEL: 100 ppm 15 minutes. |
| | TWA: 191 mg/m³ 8 hours. |
| | TWA: 50 ppm 8 hours. |
| crystalline silica, respirable powder (<10 microns) | EH40/2005 WELs (United Kingdom (UK), 1/2020). [silica, |
| , , , , , , , , , , , , , , , , , , , , | respirable crystalline] |
| | TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction |
| Product/ingredient name | Exposure indices |

procedures

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

DNELs/DMELs

6/16 United Kingdom (UK) English (GB)

SIGMAWELD 165 PASTE REDGREY

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Туре | Exposure | Value | Population | Effects |
|-------------------------|------|-----------------------|-------------------------|--------------------|----------|
| propan-2-ol | DNEL | Long term Inhalation | 500 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 888 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral | 26 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Oral | 51 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 89 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 178 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 319 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 1000 mg/m ³ | Workers | Systemic |
| 1-methoxy-2-propanol | DNEL | Long term Oral | 33 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 43.9 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 78 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 183 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 369 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 553.5 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 553.5 mg/m ³ | Workers | Systemic |
| toluene | DNEL | Long term Oral | 8.13 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 56.5 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 56.5 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 192 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 192 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 226 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 226 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 226 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 384 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 384 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 384 mg/m³ | Workers | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|------------------------------------|------------------------|-----------------|--------------------------|
| zinc powder zinc dust (stabilised) | Fresh water | 20.6 μg/l | Sensitivity Distribution |
| | Marine water | 6.1 µg/l | Sensitivity Distribution |
| | Sewage Treatment Plant | 100 μg/l | Assessment Factors |
| | Fresh water sediment | 118 mg/kg dwt | Sensitivity Distribution |
| | Marine water sediment | 56.5 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 35.6 mg/kg dwt | Sensitivity Distribution |
| propan-2-ol | Fresh water | 140.9 mg/l | Assessment Factors |
| | Marine water | 140.9 mg/l | Assessment Factors |
| | Secondary Poisoning | 160 mg/kg | - |
| | Fresh water sediment | 552 mg/kg dwt | - |
| | Marine water sediment | 552 mg/kg dwt | - |
| | Sewage Treatment Plant | 2251 mg/l | Assessment Factors |
| | Soil | 28 mg/kg dwt | - |
| 1-methoxy-2-propanol | Fresh water | 10 mg/l | Assessment Factors |
| | Marine water | 1 mg/l | Assessment Factors |
| | Sewage Treatment Plant | | Assessment Factors |
| | Fresh water sediment | 41.6 mg/kg | Equilibrium Partitioning |
| | Marine water sediment | 4.17 mg/kg | Equilibrium Partitioning |
| | Soil | 2.47 mg/kg | Equilibrium Partitioning |
| toluene | Fresh water | 0.68 mg/l | Sensitivity Distribution |
| | Marine water | 0.68 mg/l | Sensitivity Distribution |
| | Sewage Treatment Plant | 13.61 mg/l | Sensitivity Distribution |
| | Fresh water sediment | 16.39 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 16.39 mg/kg dwt | - |
| zinc oxide | Fresh water | 20.6 µg/l | Sensitivity Distribution |
| | Marine water | 6.1 µg/l | Sensitivity Distribution |
| | Fresh water sediment | 117 mg/kg dwt | Sensitivity Distribution |
| | Sewage Treatment Plant | 52 μg/l | Assessment Factors |
| | Marine water sediment | 56.5 mg/kg dwt | Assessment Factors |
| | Soil | 35.6 mg/kg dwt | Sensitivity Distribution |

English (GB) United Kingdom (UK) 7/16

SIGMAWELD 165 PASTE REDGREY

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection 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
Skin protection
Hand protection

: Chemical splash goggles.

: 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 antistatic 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.

English (GB) United Kingdom (UK) 8/16

SIGMAWELD 165 PASTE REDGREY

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 : Not available. Characteristic. Odour Not available. **Odour threshold**

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: -92.28°C

(-134.1°F)

Initial boiling point and

boiling range

: >37.78°C (>100°F)

Flammability (solid, gas)

Upper/lower flammability or

explosive limits

! liquid : Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)

Flash point : Closed cup: 13°C (55.4°F)

Auto-ignition temperature

| Ingredient name °C | C | °F | Method |
|-------------------------|-----|-----|--------|
| 1-methoxy-2-propanol 27 | 270 | 518 | |

pΗ Not applicable.

Not applicable. insoluble in water.

: Kinematic (40°C): >21 mm²/s **Viscosity**

Solubility(ies)

| Media | Result |
|------------|-------------|
| cold water | Not soluble |

Miscible with water : No.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure

| | Vapour Pressure at 20°C | | Vap | our pressu | re at 50°C | |
|-----------------|-------------------------|-----|--------|------------|------------|--------|
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| propan-2-ol | 33.00268 | 4.4 | | | | |

Relative density 1.98

Vapour density : Highest known value: 3.11 (Air = 1) (1-methoxy-2-propanol). Weighted average:

2.51 (Air = 1)

: The product itself is not explosive, but the formation of an explosible mixture of **Explosive properties**

vapour or dust with air is possible.

Oxidising properties Particle characteristics

Product does not present an oxidizing hazard.

Median particle size : Not applicable.

> 9/16 United Kingdom (UK) English (GB)

SIGMAWELD 165 PASTE REDGREY

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 toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|---------------------------|---------|-------------------------|----------|
| z nc powder zinc dust | LC50 Inhalation Dusts and | Rat | >5.4 mg/l | 4 hours |
| (stabilised) | mists | | | |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| propan-2-ol | LC50 Inhalation Vapour | Rat | 72600 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 12800 mg/kg | - |
| | LD50 Oral | Rat | 5045 mg/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 | - |
| toluene | LC50 Inhalation Vapour | Rat | 49 g/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 8.39 g/kg | - |
| | LD50 Oral | Rat | 5580 mg/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 | - |

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) |
|-------------------------|------------------|-------------------|--------------------------------|-----------------------------------|----------------------------------------------|
| propan-2-ol | 5045 | 12800 | N/A | N/A | N/A |
| 1-methoxy-2-propanol | 5200 | 13000 | N/A | | N/A |
| toluene | 5580 | 8390 | N/A | | N/A |

Irritation/Corrosion

Conclusion/Summary: Not available.

SkinThere are no data available on the mixture itself.EyesThere 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.

English (GB) United Kingdom (UK) 10/16

SIGMAWELD 165 PASTE REDGREY

SECTION 11: Toxicological information

: There are no data available on the mixture itself. Respiratory

Mutagenicity

Conclusion/Summary

Carcinogenicity

: There are no data available on the mixture itself.

Conclusion/Summary

: There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary

: There are no data available on the mixture itself.

Teratogenicity

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

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 |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|--------------------------|-------------------|---------------|
| | Category 2 Category 1 | - inhalation | - |

Aspiration hazard

| Product/ingredient name | Result | |
|-------------------------|--------------------------------|--|
| toluene | ASPIRATION HAZARD - Category 1 | |

Information on likely routes: Not available.

of exposure

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 : Defatting to the skin. May cause skin dryness and irritation.

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

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : 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

11/16 English (GB) **United Kingdom (UK)**

SIGMAWELD 165 PASTE REDGREY

SECTION 11: Toxicological information

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

: Not available.

effects

Potential delayed effects : Not

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : May cause 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 | Exposure |
|------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------|
| zínc powder zinc dust (stabilised) | Acute EC50 0.106 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 354 μg/l Fresh water | Daphnia - Water flea - <i>Daphnia</i> magna | 48 hours |
| | Chronic EC10 6.3 μg/l | Daphnia - Water flea - <i>Daphnia magna</i> - Neonate | 21 days |
| | Chronic LC10 185 µg/l Fresh water | Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i> - Juvenile (Fledgling, Hatchling, Weanling) | 30 days |
| propan-2-ol | Acute EC50 10100 mg/l Fresh water | Daphnia - Water flea - <i>Daphnia</i> magna | 48 hours |
| 1-methoxy-2-propanol | Acute LC50 23300 mg/l | Daphnia - Daphnia | 48 hours |
| | Acute LC50 >4500 mg/l Fresh water | Fish - Goldfish | 96 hours |
| zinc oxide | Acute EC50 0.17 mg/l | Algae | 72 hours |
| | Acute EC50 0.481 mg/l Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> - Neonate | 48 hours |
| | Chronic NOEC 0.017 mg/l Fresh water | Algae | 72 hours |

English (GB) United Kingdom (UK) 12/16

SIGMAWELD 165 PASTE REDGREY

SECTION 12: Ecological information

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| voluene | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|------|-----------|
| propan-2-ol | 0.05 | - | Low |
| 1-methoxy-2-propanol | <1 | - | Low |
| toluene | 2.73 | 8.32 | Low |

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

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

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

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

Yes.

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.

| Type of packaging | Waste catalogue | |
|-------------------|-----------------|-----------------|
| Container | 15 01 06 | mixed packaging |

English (GB) United Kingdom (UK) 13/16

SIGMAWELD 165 PASTE REDGREY

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 | 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)

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or **ADN**

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.

user

14.6 Special precautions for : 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

None of the components are listed.

Ozone depleting substances

Not listed.

14/16 **United Kingdom (UK)** English (GB)

SIGMAWELD 165 PASTE REDGREY

SECTION 15: Regulatory information

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| Category | |
|-----------|---|
| P5c E1 | _ |
| | |

National regulations

| Product/ingredient name | List name | Name on list | Classification | Notes |
|-------------------------|----------------------|----------------------------------------------------------|----------------|-------|
| Quartz (SiO2) | Exposure Limits EH40 | silica, respirable crystalline respirable fraction | 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. Lig. 2, H225 | On basis of test data | |
| Eye Irrit. 2, H319 | Calculation method | |
| Repr. 2, H361d | Calculation method | |
| STOT SE 3, H336 | Calculation method | |
| STOT RE 2, H373 | Calculation method | |
| Aquatic Acute 1, H400 | Calculation method | |
| Aquatic Chronic 1, H410 | Calculation method | |

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. |
| H361d | Suspected of damaging the unborn child. |
| 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. |

Full text of classifications

| English (GB) | United Kingdom (UK) | 15/16 |
|--------------|---------------------|-------|
|--------------|---------------------|-------|

SIGMAWELD 165 PASTE REDGREY

SECTION 16: Other information

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

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
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 : 1 July 2024

revision

Date of previous issue : 23 October 2023

Prepared by : EHS Version : 1.03

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.

English (GB) United Kingdom (UK) 16/16