

**SIGMAZINC 170 PIGMENT**

MSDS UK 01 / EN Version 1

Print Date 11/4/2009
Revision date 20-10-09**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : SIGMAZINC 170 PIGMENT
Technical data sheet number : For further information see Technical Data Sheet.

Recommended use : coating

Company : PPG Coatings SPRL/BVBA
 Noordersingel 23
 B-2040 Borgerhout

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2. HAZARDS IDENTIFICATION

Symbol(s) :
 Dangerous for the environment

R-phrase(s) :
 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE
 AQUATIC ENVIRONMENT.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | EC No. | CAS-No. | DSD | Note | Classification | Concentration |
|-------------|-----------|-----------|------|------|----------------|-----------------------|
| zinc powder | 231-175-3 | 7440-66-6 | 29th | | N; R50, R53 | >=75.00 - <100.00% |
| Zinc oxide | 215-222-5 | 1314-13-2 | 29th | | N; R50, R53 | >=2.50 - <10.00% |

Producer declares that for R-phrases not mentioned in chapters 3, the entire amount of hazardous substances is below limits. For components with an occupational threshold limit value see chapter 8.

If multiple components with identical identifiers appear, these have different hazardous properties, e.g. flashpoint.

4. FIRST AID MEASURES

General advice : When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Remove contact lenses. Seek medical advice.

Skin contact : Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

**SIGMAZINC 170 PIGMENT**

MSDS UK 01 / EN Version 1

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- Inhalation** : Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice.
- Ingestion** : If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
- Burns** : If spills on clothing catch fire, wash with plenty of water. Remove loose clothing. Do not remove clothing that has melted to the skin. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

- Specific hazards during fire fighting** : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
- Special protective equipment for fire-fighters** : In the event of fire, wear self-contained breathing apparatus.
- Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
- Extinguishing media which shall not be used for safety reasons** : Do NOT use water jet.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Use personal protective equipment. Ventilate the area. Refer to protective measures listed in sections 7 and 8. Wear respiratory protection. Remove all sources of ignition. Avoid breathing dust.
- Environmental precautions** : Try to prevent the material from entering drains or water ways. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up** : Clean with detergents. Avoid solvents. Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- Additional advice** : Refer to section 15 for specific national regulation.

7. HANDLING AND STORAGE

- Handling**
- Safe handling advice** : Avoid exceeding of the given occupational exposure limits (see section 8). Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Do not breathe vapours/dust. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used.
- Storage**
- Requirements for storage areas and containers** : Observe label precautions. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store between 5 and 30°C (41 - 86 F) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking.
- Advice on common storage** : Keep away from oxidising agents and strongly acid or alkaline materials.

SIGMAZINC 170 PIGMENT

MSDS UK 01 / EN Version 1

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Revision date 20-10-09

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Components | CAS-No. | Value [mg/m ³] | Value [ppm] | Basis |
|------------|---------|-------------------------------|----------------|-------|
|------------|---------|-------------------------------|----------------|-------|

Personal protective equipment**General advice**

Respiratory protection : Apply technical measures to comply with the occupational exposure limits. This should be achieved by a good general extraction and "if practically feasible" by the use of local exhaust ventilation. If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.

Hand protection : For prolonged or repeated contact use protective gloves. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred. Skin should be washed after contact. Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms.

Recommended gloves: Chemical resistant gloves

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.

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Personnel should wear protective clothing. Skin should be washed after contact.

Additional advice

Environmental protection : Refer to national regulations in chapter 15 for regulations on environmental protection.

Personal protection

Protective equipment : Enclosing glasses, safety gloves and P2 half-face mask



Please contact your personal protection equipment supplier for further advice

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : powder
Colour :
Odour : none

**SIGMAZINC 170 PIGMENT**

MSDS UK 01 / EN Version 1

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Revision date 20-10-09

| | | |
|---------------------------------|---|-----------------------------------|
| Flash point | : | Note: not applicable |
| Autoignition temperature | : | Note: no data available |
| Upper explosion limit | : | Note: not applicable |
| Lower explosion limit | : | Note: not applicable |
| Density | : | 7.1 g/cm ³ at 20 °C |
| Water solubility | : | not applicable |
| pH | : | no data available |
| Viscosity, dynamic | : | Note: not applicable |

10. STABILITY AND REACTIVITY

| | | |
|---|---|--|
| Conditions to avoid | : | Avoid temperatures above 60°C (140 F), direct sunlight and contact with sources of heat. |
| Hazardous reactions | : | Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. |
| Hazardous decomposition products | : | In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke. Zinc oxide fumes. |

11. TOXICOLOGICAL INFORMATION

| | | |
|----------------------------------|---|---|
| Product information | : | There is no data available for this product. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details. |
| Acute oral toxicity | : | May cause nausea, abdominal spasms and irritation of the mucous membranes. |
| Acute inhalation toxicity | : | Inhalation of airborne particles may cause irritation of the respiratory tract. |
| Skin irritation | : | Powder can cause localised skin irritation in folds of the skin or under tight clothing. |
| Eye contact | : | Contact with eyes may cause irritation. |
| Further information | : | There is no data available for this product. |

Acute Toxicity Data for Components

zinc powder(7440-66-6)

Acute oral toxicity : LD50: 15 mg/kg (mouse)**12. ECOLOGICAL INFORMATION**

| | | |
|----------------------------|---|--|
| Further information | : | No data is available on the product itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for ecotoxicological properties accordingly. See sections 3 and 15 for details. The product should not be allowed to enter drains, water courses or the soil. |
|----------------------------|---|--|

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Product : The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

Waste key for the unused product : The European Waste Catalogue classification of this product, when disposed of as waste is:

08 02 01 Waste coating powders.

If this product is fully cured or mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information contact your local waste authority

14. TRANSPORT INFORMATION

Transport within user's premises: always transport in closed containers that are upright, labelled and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport to be in accordance with ADR for road, IMDG for sea and IATA for air transport:

UN-Number : 3077
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Class : 9
 Packing group (ADR) : III
 Label : 9
 Proper shipping name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S.
 Technical name 1 : zinc powder
 Technical name 2 : Zinc oxide

Packing group (IMDG/IATA) : III
 Marine Pollutant (IMDG) : Marine Pollutant
 Marine Pollutant component (IMDG) : zinc powder
 EmS (IMDG) : F-A, S-F

Limited quantity (ADR) : Max. per inner pack. : 6.00 KG
 Max. per outer pack. : 30.00 KG
 Limited quantity (IMDG) : Max. per inner pack. : 5.00 KG
 Max. per outer pack. : 30.00 KG

15. REGULATORY INFORMATION

The product is classified and labelled in accordance with Directive 1999/45/EC.



**Dangerous for the
environment**

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R-phrases(s) : R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s) : S22 Do not breathe dust.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

National legislation**Further information**

HS (G) 37, An introduction to Local Exhaust Ventilation, HSE., Health and Safety at Work etc Act, 1974, and relevant Statutory Provisions., Environmental Protection Act, 1990 and associated legislation., The Special Waste Regulations, 1996 and amendments., The Chemicals (Hazard Information and Packaging for Supply) Regulations, 1994 and amendments., EH 40, Occupational Exposure Limits, HSE. Revised annually., HS(G) 53, Respiratory Protective Equipment - A Practical Guide for Users, HSE., HS(G) 97, A Step by Step guide to COSHH Regulations, HSE., EH 173, Monitoring Strategies for Toxic Substances, HSE., EH44, Dust in the Workplace: General Principles of Protection, HSE.

16. OTHER INFORMATION**Explanation of R-phrases mentioned in section 3**

| | | |
|-------------|--------|--|
| zinc powder | R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Zinc oxide | R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

This Safety Data Sheet is based on the Safety Data Sheets obtained from the producer/manufacturer or/and internet databases and valid regulations considering hazardous substances/preparations.

Training advice:

Persons taking part in a turnover of hazardous products ought to be trained in product handling, safety and hygiene.

Drivers ought to be trained and obtain a certificate in accordance with the requirements of transport regulations (ADR).

Version: 1

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The information contained in this safety data sheet is based on the present state of knowledge and current European and National legislation at the date of issue. The supplier reserves the right to modify data on the safety data sheet without further notice. Any change in data will normally be followed by the issue of a new safety data sheet. The user should

SAFETY DATA SHEET

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No. 1907/2006.



**PPG Protective &
Marine Coatings**

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check the date of issue and if more than 12 months have elapsed, then the data should only be used after checking with the nearest sales office of the supplier to establish that the data is still valid. As the specific conditions of use of the product are outside the suppliers control, the supplier is not responsible for the (negative) consequences of these specific conditions of use, which are outside of the suppliers control and which are not compliant with the handling, storage and other instructions in this safety data sheet.

After all component(s) stated on the relevant Technical Data Sheet have been mixed the safety precautions mentioned on each of the component(s) safety data sheets and labels should be used in assessing the safety precautions of the mixed product.

Technical data sheet number 7559