

# SAFETY DATA SHEET



DIMETCOTE 21-5/4A POWDER

Date of issue 16 June 2019

Version 6

## 1. Product and company identification

**Product name** : DIMETCOTE 21-5/4A POWDER

**Product code** : 00335605

**Product type** : Powder.

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

**Product use** : Industrial applications, Used by spraying.

**Use of the substance/  
mixture** : Coating.

**Uses advised against** : Not applicable.

**Supplier's details** : PPG PMC Japan Co., Ltd.  
8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803  
Tel : +81 78 574 2777  
Fax : +81 78 576 0035

**Emergency telephone  
number** : 078 574 2777

## 2. Hazards identification

**GHS Classification** : EYE IRRITATION - Category 2B  
CARCINOGENICITY - Category 1A  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (respiratory system, systemic toxicity) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) - Category 2  
AQUATIC HAZARD (ACUTE) - Category 1  
AQUATIC HAZARD (LONG-TERM) - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Causes eye irritation.  
May cause cancer.  
May cause damage to organs. (respiratory system, systemic toxicity)  
May cause damage to organs through prolonged or repeated exposure. (respiratory system)  
Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

## 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
- Response** : Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : May form explosible dust-air mixture if dispersed. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

## 3. Composition/information on ingredients

**Substance/mixture** : Mixture

### CAS number/other identifiers

**CAS number** : Not applicable.

**ENCS number** : Not available.

Ingredient name	%	CAS number	ENCS
zinc powder - zinc dust (stabilized)	50 - 100	7440-66-6	Not available.
Zinc oxide	2 - <3	1314-13-2	1-561
mica [Hydrous potassium aluminum silicate, mica powder, white mica]	2 - <3	12001-26-2	Not available.
Crystalline-quartz	0.1 - <0.2	14808-60-7	1-548

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 and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

## 4. First aid measures

### Description of necessary 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 recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes eye irritation.

## 4. First aid measures

- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : May cause damage to organs following a single exposure in contact with skin.
- Ingestion** : May cause damage to organs following a single exposure if swallowed.

### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

- Specific hazards arising from the chemical** : May form explosible dust-air mixture if dispersed. 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 thermal decomposition products** : Decomposition products may include the following materials:  
metal oxide/oxides

- 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.

## 6. Accidental release measures

### 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized 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".
- Environmental precautions** : Avoid dispersal of spilled 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.

### Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid release to the environment. Refer to special instructions/safety data sheet. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

## 7. Handling and storage

**Conditions for safe storage** : Do not store below the following temperature: 5°C (41°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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	Exposure limits
Zinc oxide	<b>Japan Society for Occupational Health (Japan, 5/2017).</b> OEL-M: 1 mg/m <sup>3</sup> 8 hours. Form: Respirable dust
Crystalline-quartz	OEL-M: 4 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>Japan Society for Occupational Health (Japan, 5/2017).</b> OEL-C: 0.03 mg/m <sup>3</sup> Form: Respirable dust

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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.

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, 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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**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.

### 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 protection** : Safety glasses with side shields.

### Skin protection

## 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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.
- 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.

## 9. Physical and chemical properties

### Appearance

- Physical state** : Solid.
- Odor** : Characteristic.
- Flash point** : Closed cup: Not applicable.
- Material supports combustion.** : Yes.
- Relative density** : 6.79
- Solubility** : Insoluble in the following materials: cold water.
- Viscosity** : Not Applicable

## 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
- Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
- Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

# 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Zinc powder - zinc dust (stabilized)	LC50 Inhalation Dusts and mists	Rat	>5.4 mg/l	4 hours
Zinc oxide	LD50 Oral	Rat	>2000 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

### Irritation/Corrosion

Not available.

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Zinc oxide	Category 1	Not determined	respiratory system and systemic toxicity

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
mica [Hydrous potassium aluminum silicate, mica powder, white mica]	Category 1	Not determined	respiratory system
Crystalline-quartz	Category 1	Not determined	immune system, kidneys and respiratory system

### Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

### Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : May cause damage to organs following a single exposure in contact with skin.
- Ingestion** : May cause damage to organs following a single exposure if swallowed.

## 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: Adverse symptoms may include the following: irritation watering redness
<b>Inhalation</b>	: Adverse symptoms may include the following: respiratory tract irritation coughing
<b>Skin contact</b>	: No specific data.
<b>Ingestion</b>	: No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Long term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Potential chronic health effects

<b>General</b>	: May cause damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
<b>Carcinogenicity</b>	: May cause cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

#### Other information :

Keep container tightly closed. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Prevent dust accumulation. Emits toxic fumes when heated.

## 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
zinc powder - zinc dust (stabilized)	Acute EC50 0.106 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
Zinc oxide	Chronic NOEC 0.0727 mg/l Fresh water	Daphnia - Daphnia Magna	21 days
	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours



## 12. Ecological information

### Persistence/degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

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

## 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

	UN	IMDG	IATA
<b>UN number</b>	UN3077	UN3077	UN3077
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc powder - zinc dust (stabilized), zinc oxide)
<b>Transport hazard class(es)</b>	9	9	9
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	Yes.	Yes.	Yes.
<b>Marine pollutant substances</b>	Not applicable.	(Zinc powder - zinc dust (stabilized), zinc oxide)	Not applicable.

### Additional information

**UN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

## 14. Transport information

- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. The segregation group has been manually assigned based upon product analysis.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**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.

## 15. Regulatory information

### Fire Service Law

None of the components are listed.

### Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

### ISHL

#### Use of specified chemical substances

None of the components are listed.

### Label requirements

Ingredient name	%	Status	Reference number
Zinc oxide	<3.0	Listed	188
Crystalline silica	≤0.30	Listed	165-2

### Chemicals requiring notification

Ingredient name	%	Status	Reference number
Zinc oxide	<3.0	Listed	188
Crystalline silica	≤0.30	Listed	165-2

### Carcinogen

None of the components are listed.

### Mutagen

None of the components are listed.

**Corrosive liquid** : Not listed

**Occupational Safety and Health Law** : Not available.

**Prevention of Tetraalkyl Lead Poisoning** : Not listed

**Harmful Substances Subject to Obtaining Permission for Manufacturing** : Not listed

**Harmful Substances, Prohibited for Manufacturing** : Not listed

**Dangerous Substances** : Combustible

## 15. Regulatory information

**Lead regulation** : Not listed

**Organic solvents poisoning prevention** : Not available.

### Poisonous and Deleterious Substances

None of the components are listed.

### Chemical Substances Control Law (CSCL)

None of the components are listed.

**High Pressure Gas Control Law** : Not available.

### Explosives Control Law

None of the components are listed.

**Law Concerning Prevention of Pollution of the Ocean and Maritime Disaster** : Marine pollutant: P

### Maritime Safety Law

#### Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

### Container class

None of the components are listed.

**JSOH Carcinogen** : Group 1

**List of Specially Controlled Industrial Waste** : Not listed

**Japan inventory** : All components are listed or exempted.

**Road law** : Not available.

## 16. Other information

### History

**Date of issue/Date of revision** : 16 June 2019

**Date of previous issue** : 12/20/2018

**Version** : 6

**Prepared by** : EHS

**Key to abbreviations** : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

## 16. Other information

UN = United Nations

▣ Indicates information that has changed from previously issued version.

### Notice to reader

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 PPG, 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.