

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Minister of Industry Decree No. 23/M-IND/PER/4/2013 and GHS Classification 4th Edition.

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SECTION 1: Identification

1.1. Product identifier

3M[™] Ceramic Microspheres W-210, W-410, W-610

1.2. Recommended use and restrictions on use

Recommended use

Additive for Paint, Coating and Film Applications, Unique, semi-transparent, white-colored, fine particle size, high-strength microspheres, used to reduce VOC levels, increase filler loadings, improve hardness, and add burnish, scrub and abrasion resistance to a variety of coating formulations.

1.3. Supplier's details

ADDRESS:PT 3M Indonesia , Perkantoran Hijau Arkadia, Menara F, Lt. 8. Jl. TB. Simatupang Kav. 88, Jakarta
Selatan, 12520, IndonesiaTelephone:+6221-29974000
https://www.3m.co.id/3M/en_ID/company-id/

1.4. Emergency telephone number

(021)29974000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Acute Toxicity (oral): Category 5.

2.2. Label elements

Signal word Warning

Symbols Not applicable

Pictograms Not applicable

HAZARD STATEMENTS:

H303

May be harmful if swallowed.

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Ceramic Microspheres	66402-68-4	100

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Material will not burn. Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. Observe precautions from other sections.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Use wet sweeping compound or water to avoid dusting. Sweep up.

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Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety Glasses with side shields

Skin/hand protection

No chemical protective gloves are required.

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Specific Physical Form:	Fine Powder (less than 10 microns)
Color	White
Odor	Odorless

Odor threshold	Not Applicable
рН	9 - 11 [Details:1% aqueous solution]
Melting point/Freezing point	1,000 °C
Boiling point/Initial boiling point/Boiling range	Not Applicable
Flash Point	Not Applicable
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density and/or Relative Vapor Density	Not Applicable
Density	2.1 - 2.5 g/cm3
Relative Density	2.1 - 2.5 [<i>Ref Std</i> :WATER=1]
Water solubility	Negligible
Solubility- non-water	Not Applicable
Partition coefficient: n-octanol/ water	Not Applicable
Autoignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Viscosity/Kinematic Viscosity	Not Applicable
Volatile Organic Compounds	Not Applicable
Percent volatile	Not Applicable
VOC Less H2O & Exempt Solvents	Not Applicable
Bulk density	60 - 80 lb/ft3
Molecular weight	No Data Available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance

None known.

Condition At Elevated Temperatures

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000
			mg/kg
Ceramic Microspheres	Dermal		LD50 estimated to be > 5,000 mg/kg
Ceramic Microspheres	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ceramic Microspheres	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ceramic Microspheres	Rabbit	Mild irritant

Sensitization:

Skin Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Ceramic Microspheres	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Ceramic Microspheres	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

For the component/components, either no data are currently available or the data are not sufficient for classification.

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ceramic Microspheres	Inhalation	pulmonary fibrosis	Not classified	Multiple animal species	NOAEL not available	
Ceramic Microspheres	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Туре	Exposure	Test Endpoint	Test Result
Ceramic	66402-68-4			N/A	N/A	N/A
Microspheres			or insufficient for classification			
			classification			

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Ceramic	66402-68-4	Data not availbl-	N/A	N/A	N/A	N/A
Microspheres		insufficient				

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Ceramic	66402-68-4	Data not available	N/A	N/A	N/A	N/A
Microspheres		or insufficient for				
_		classification				

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Local Regulations

Land Transport: In accordance with Director General of Land Transportation Decree No. SK.725/AJ.302/DRJD/2004 which refer to UN Standard.

Sea Transport: In accordance with Minister of Transportation Decree No. KM 2/2010 which refer to IMDG Code Standard.

International Regulations NOT HAZARDOUS FOR TRANSPORT UN No.: Not applicable UN Proper Shipping Name: Not applicable Transportation Class (IMO): Not applicable Transportation Class (IATA): Not applicable

Packing Group: Not applicable Marine Pollutant: Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status Contact 3M for more information.

Local Inventory Status

Addendum I Government Regulation No. 74/2001:

List of Hazardous Substances Approved for Use :

None of the substances are listed as a Hazardous Substance Approved for Use.

Addendum II Government Regulation No. 74/2001:

Tab.1 List of Prohibited Substances for Use:

None of the substances are listed as a Prohibited Substance for Use.

Addendum II Government Regulation No. 74/2001:

Tab.2 List of Restricted Substances for Use: None of the substances are listed as a Restricted Substance for Use.

Addendum I Ministry of Health Regulation No. 472/1996:

List and Classification of Hazardous Substances for Health:

None of the substances are listed and classified as a Hazardous Substance for Health.

Addendum I Act of Minister of Industry and Trade No. 254/MPP/KEP/2000

List of Hazardous Substances that are Regulated to Import Trade System: None of the substances are listed and classified as a Hazardous Substance that is Regulated to Import Trade System.

SECTION 16: Other information

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3M Indonesia SDSs are available at https://www.3m.co.id/3M/en_ID/company-id/