

SAFETY DATA SHEET

(KZ-3YF(SD) Type Y)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Zirconia Powder KZ-3YF(SD) Type Y
Chemical Name: Mixture of Yttria Stabilized Zirconia and Organic Binder.
Supplier: KCM CORPORATION
No.41, 2-chome, Tsukisan-cho, Minato-ku, Nagoya, 455-8668 Japan
Emergency Phone: +81-52-661-3185
Business Phone: +81-52-661-3185
Preparation Date: April 18, 2016
Review Date: November 12, 2020

2. HAZARDS IDENTIFICATION

GHS Classification:

[Physical Hazard] Not classified
[Health Hazard] Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 2
[Environmental Hazard] Not classified



Symbol:

Signal word: Warning

Hazard statement:

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statement:

[Prevention]

P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

[Response]

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Mixture of Yttria Stabilized Zirconia and Organic Binder.

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Formula/Chemical Structure: ZrO_2 89 ~ 96 wt% HfO_2 Max. 5 wt% Y_2O_3 4 ~ 6 wt%

Organic Binder 2 ~ 5 wt%

CAS Number: ZrO_2 (1314-23-4), HfO_2 (12055-23-1), Y_2O_3 (1314-36-9),

Organic Binder: Not applicable

EINECS/ELINCS Number: ZrO_2 (215-227-2), HfO_2 (235-013-2), Y_2O_3 (215-233-5)

Organic Binder: Not applicable

4. FIRST-AID MEASURES

- Eyes: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Get medical aid.
- Skin: Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. Get medical aid.
- Ingestion: Give several glasses of water. Vomiting may occur spontaneously, but do not induce! Never give anything by mouth to an unconscious person. Get medical aid.
- Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
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5. FIRE-FIGHTING MEASURES

- Flash Point: Not available. The product is not flammable.
- Auto-ignition Temperature: Not available. The product is not flammable
- Flammable Limits (in air by volume): Not available. The product is not flammable
- Fire Extinguishing Media: The product is not combustible. Use any means suitable for extinguishing surrounding fire.
- Fire and Explosion Hazards: Not available.
- Explosion Sensitivity to Mechanical Shock: Not applicable.
- Explosion Sensitivity to Static Discharge: Not applicable.
- Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.
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6. ACCIDENTAL RELEASE MEASURES

- Personnel Safety Precautions: Wear suitable protective equipment.
- How to clean up spills: Sweep up and place in suitable containers for waste disposal.
- Disposal: Dispose of in a manner consistent with appropriate state, local or national regulations.

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7. HANDLING AND STORAGE

Safe Handling: Avoid breathing dust. Wear suitable protective respirators and goggles.

Do not get in eyes, on skin and on clothing. Use with adequate ventilation.

Avoid creating dust. Wash thoroughly after handling.

Storage: Store in cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Permissible concentration: 5 mg/m³ TWA-listed under Zr

1 mg/m³ TWA-listed under Y

Engineering controls: Use adequate mechanical ventilation to keep airborne concentrations below the permissible exposure limits.

Eye/Face protection: Wear protective eyeglasses or chemical safety goggles.

Respiratory protection: Wear appropriate protective respirator to avoid breathing dust.

Hand protection: Wear appropriate protective gloves to prevent skin exposure.

Hygiene measures: Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid (Granule)

Color: White

Odor: None

pH: Not available. Data lacking.

Melting point: Not available. Data lacking.

Boiling point: Not available. Data lacking.

Flash point: Not available. The product is not flammable.

Flammability limit-lower: Not available. The product is not flammable.

Flammability limit-upper: Not available. The product is not flammable.

Vapour pressure: Not available. Data lacking.

Bulk density: 6.0 ~ 6.1 g/cm³

Solubility: Insoluble in water, organic solvent.

Partition coefficient: Not available. The product is insoluble in water or organic solvent.
(n-Octanol/Water)

Auto ignition temperature: Not available. The product is not flammable.

Decomposition temperature: Not available. Data lacking.

10. STABILITY AND REACTIVITY

Stability: The product is stable under normal temperatures and pressures.

Conditions to Avoid: None

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Incompatible materials: Not available. Data lacking.

Hazardous decomposition products: None.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not available. Data lacking.

Skin corrosion/irritation: Classified into category2. The product may cause skin irritation due to very fine primary particle of zirconium oxide.

Serious eye damage/eye irritation: Classified into category2. The product may cause eye irritation due to granular particle nature.

Respiratory sensitization: Not available. Data lacking.

Skin sensitization: Not available. Data lacking.

Germ cell mutagenicity: Not available. Data lacking.

Carcinogenicity: Not available. Data lacking.

Reproductive toxicity: Not available. Data lacking.

Specific target organ toxicity-single exposure: Not available. Data lacking.

Specific target organ toxicity-repeated exposure: Not available. Data lacking.

Aspiration hazard: Not available. Data lacking.

12. ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (Acute aquatic hazard):

Not available. Data lacking.

Hazardous to the aquatic environment (Chronic (long term) aquatic hazard):

Not available. Data lacking

Ecotoxicity: Not available. Data lacking.

Persistence and degradability: Not available. Data lacking.

Bioaccumulation: Not available. Data lacking.

Mobility in soil: Not available. Data lacking.

13. DISPOSAL CONSIDERATIONS

Waste disposal and contaminated container and contaminated packaging must be in accordance with national or local regulations.

Do not dump this material into sewers, on the ground or into any body of water.

14. TRANSPORTATION INFORMATION

The packing must be sealed tightly and loading the package must be given without any collapse and damage during transportation.

UN Number: Not available (Not applicable)

UN Proper shipping name: Not available (Not applicable)

UN classification: Not available (Not classified)

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Packing group: Not available (Not applicable)

Marine pollutant: No

15. REGULATORY INFORMATION

Not available

Please refer to national measures that may be relevant.

16. OTHER INFORMATION

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of stability of this information to ensure proper use and protect the health and safety of employees

Contact:

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