

SAFETY DATA SHEET

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

Product Name: **Denka Cosmic RD-M**
Application: Quick hardening cementitious grout for semi-rigid pavement
Company: Denka Construction Solutions Malaysia Sdn Bhd
Address: No. 18, Jalan Utas 15/7, Seksyen 15, 40200 Shah Alam, Selangor, Malaysia
Telephone: 03 – 55108810 **Fax:** 03 – 55100708

2. HAZARD IDENTIFICATION

A. Hazard Risk Classification

- Health Hazard
 - Skin Corrosion / Irritation : Category 2
 - Skin Sensitization : Category 1
 - Serious Eye Damage / Eye Irritation : Category 1
 - Carcinogenicity : Category 1A
 - Specific target organ / System toxicity : Category 3

B. Label elements including precaution statements.

- Symbol:



- Signal word: Warning
- Hazard Risk Statement
 - H315 Cause skin irritation.
 - H317 May cause an allergic skin reaction
 - H319 Causes serious eye irritation.
 - H350 Fear of carcinogenicity
 - H335 May cause respiratory irritation
- Precautionary Statement (Prevention)
 - P201 Obtain special instruction before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P332 + P313 If skin irritation occurs. Get medical advice / attention.
 - P362 Take off contaminated clothing and wash before reuse.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	Cas Number	%
Cement (OPC)	65997-15-1	72 ~ 80
Silica Fume	69012-64-2	1 ~ 10
Silicon Dioxide	7631-86-9	1 ~ 10
Polycarboxylic Acid	62601-60-9	0.1 ~ 0.5
Gypsum	7778-18-9	5 ~ 10

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or EILINCS (European List of New Chemical Substances) or are exempt. Refer to Section 8 for Occupational Exposure Limits.

4. FIRST AID MEASURES

Eyes: Irrigate immediately with copious of quantity of water for several times. Obtain medical attention urgently.

Skin: Wash thoroughly with copious quantities of water. Remove contaminated clothing immediately. Obtain medical advice if skin disorders develop.

Inhalation: Remove from exposure, rest and keep warm and obtain medical attention urgently.

Ingestion: Wash out mouth with water. Do NOT induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: None, not flammable.

Special Exposure Hazards: None.

Special Protective Equipment: In event of fire, wear self-contained breathing apparatus for firefighters

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear rubber boots in addition to the recommended protective clothing.

Environmental Precautions: Prevent entry into drain, sewers and water courses.

Decontamination Procedures: Avoid the creation of dust in atmosphere. Gather into containers. Residue may be flushed to drain with large volumes of water. Prior consent must be obtained from local Water Company if discharged into sewer.

7. HANDLING AND STORAGE

Handling: Avoid breathing dust. In case of sufficient ventilation, wear suitable respiratory equipment. Avoid skin and eye contact.

Storage: Store in cool, dry area.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Control Measures:	Provide ventilation and local dust collection in the place where ventilation is insufficient such as indoor place, etc. Provide eye wash facilities and safety shower near the workplace where the product is handled.
Personal Protective Equipment:	Imperious gloves (eg PVC). Goggles/safety glasses. Approved dust mask. Wear imperious, chemical resistant boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Granulated Powder
Colour	Grey
Odour	Odourless
pH (working dilution)	>12
Melting point / Freezing point	No data
Boiling Point / Range (°C)	No data
Flash Point (closed °C)	None
Relative Density (at 20 °C)	2.70 ~ 3.00 g/cm ³
Water Solubility	Hardly soluble in water

10. STABILITY AND REACTIVITY

Stability:	Stable under normal condition
Condition to avoid:	Do not leave in the environment with high humidity for long time.
Material to avoid:	No Data
Hazardous Decomposition Product:	None.
Possibility of hazardous reaction	Solidified by reacting water

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	No data available
Skin Corrosions / Irritation	Causes skin irritation
Serious eye damage / eye irritation	Causes serious eye damage
Respiratory or skin sensitisation	May cause an allergic skin reaction
Germ cell mutagenicity	Not classified based on available information
Carcinogenicity	Not classified based on available information
Reproductive toxicity	Not classified based on available information
STOT – single exposure	May cause respiratory irritation
STOT – repeated exposure	Not classified based on available information
Aspiration toxicity	Not classified based on available information

12. ECOLOGICAL INFORMATION

Environmental Assessment:	Little detailed information is available on the ecological effects of this product, but its overall environmental impact is not regarded as significant.
Mobility:	It can move to the air, waters, soil environment based on physio – chemical properties
Persistence & Degradability:	No Data
Bioaccumulated Potential:	No Data
Ecotoxicity:	No Data

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local and national legislation.

Unused Product: Dispose of in an approved manner.

Used / Contaminated Product: As for unused product.

Packaging: The method of disposal must be acceptable to the local authority.

14. TRANSPORT INFORMATION

UN number	: Not applicable
Proper Shipping name	: Not applicable
UN class	: Not applicable
Packing group	: Not applicable
Marine pollutant	: Not applicable

15. REGULATORY INFORMATION

Hazard Label Data

Name Ingredients:	Cement Powders
Symbols (s):	Xi
Risk Phrases:	Irritating to eyes, respiratory system and skin.
Safety Phrases:	Do not breathe dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water.
EC Directives:	Dangerous Preparation Directive, 88/379/EEC Dangerous Substance Directive, 67/548/EEC and adaptations Safety Data Sheet Directive, 91/155/EEC
Statutory Instruments:	Chemical (Hazard Information and Packaging for Supply) (Amendment) Regs. 1996 (SI 1092)
Codes of Practice:	Waste Management. The Duty of Care.
Guidance Notes:	Occupational skin disease : health and safety precautions (EH26) Dust in workplace: General principles of protection. (EH 44) Occupational Exposure Limits (EH40)

The above publications are available from HMSO.

16. OTHER INFORMATION

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. The product should not be used than for the stated application or applications without seeking advice from Denka Construction Solutions Malaysia Sdn Bhd.

If this product has been purchased to a third party for use at work, it is the purchaser's duty to take all necessary steps to secure that any person handling or using the product is provided with information in this sheet.

It is the responsibility and duty of the employer to inform employees and others who may be affected of any hazards described to this sheet and of any precautions which should be taken. This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

SDS : Denka Cosmic RD-M

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