

SAFETY DATA SHEET

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

Product Name : DENKA SC-1

General Use : Quick hardening additive for cement

Manufacturer /Supplier :

DENKI KAGAKU KOGYO KABUSHIKI KAISHA

SPECIAL CEMENT INTERNATIONAL DEPT.

1-1, Nihonbashi-Muromachi 2-Chome, Chuo-ku,

Tokyo 103-8338, JAPAN

Tel : + 81-3-5290-5365

Fax : + 81-3-5290-5085

OMI PLANT, Niigata Pref. JAPAN

Tel : + 81-255-62-6302

Fax : + 81-255-62-6327

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name*	CAS No.	%	EINECS No.	Classification
Calcium Aluminate	11104-48-6	40-60	234-332-4	—
Calcium Sulfate	7778-18-9	40-60	231-900-3	—

*Occupational Exposure Limit(s), if available, are listed in section 8

3. HAZARDS IDENTIFICATION

Classification : Xi - irritant

Potential Health Effects : Potential health effects may vary depending on the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 8.

Inhalation : May cause respiratory tract irritation.

Skin Contact : May cause irritation and possible burns, especially if the skin is wet or moist.

Eye Contact : May cause serious damage to eyes or loss of sight because of strong alkalinity.

Ingestion : May cause gastrointestinal irritation.

Chronic : No information found.

Potential Environmental Effects : Partially soluble in water. This dissolved water is alkaline.

Do not wash away this dissolved water into rivers and so on.

4. FIRST AID MEASURES

Inhalation : Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen and consult a doctor.

Skin Contact : Immediately wash contaminated area with fresh water. Consult medical treatment if irritation or inflammation develops or persists.

Eye Contact : Do not rub eyes. Immediately rinse eyes with plenty of fresh water for at least 15 minutes and consult a doctor.

Ingestion : Rinse mouth thoroughly with fresh water. Immediately consult a doctor.

5. FIRE-FIGHTING MEASURES

Extinguishing Media : Non combustible

Flash point : Not applicable

Flammable Limits : Not applicable

Auto-ignition Temperature: Not applicable

Hazardous Combustion Products : During a fire, toxic gases may be generated by thermal decomposition (e.g. Sulfur oxide(s)).

Special Protective Equipment: Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or positive-pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use proper personal protective equipment as indicated in section 8.

Environmental precautions : Do not let this product enter the environment.

Cleaning methods : Collect the product into suitable containers avoiding dust formation.

7. HANDLING AND STORAGE

Handling : Use with adequate ventilation and local exhaust. Minimize dust generation and accumulation. Use proper personal protective equipment as indicated in section 8.

Storage : Keep in a cool, dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits

-OSHA PEL: Nuisance Dust - 15mg/m³ TWA total dust, 5mg/m³ TWA respirable fraction

-ACGIH TLV: Particulates Not Otherwise Specified - 10mg/m³ TWA inhalable fraction,
3mg/m³ TWA respirable fraction

Engineering Controls : Use adequate ventilation and local exhaust to keep airborne concentration low. Maintain eye rinse fountains and quick-drench facilities in work area.

Respiratory protection : In case of brief exposure or low pollution use filter respirator.
In case of intensive or longer exposure, use self-contained breathing protection.

Hand protection : Protective globes – e.g. Nitrile rubber, NBR globes

Eye protection : Safety spectacles with side shields or goggles with full face shield

Skin and body protection : Protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : White powder

Physical State : Solid

Odour : Odourless

pH : Dissolved water is alkaline. The pH value becomes 11-13.

Boiling Point / Boiling Range : Not available

Melting Point / Melting range : Not applicable

Flash Point : Not combustible

Flammability: Non flammable

Vapour Pressure : Not applicable

Relative Gravity : 2.90 – 3.10 g/cm³ at 20 degree Celsius

Water solubility : Partially soluble in water. Will solidify over a period of hours if moistened or wet.

10. STABILITY AND REACTIVITY

General information: Product is stable. Keep dry until use.

Conditions to Avoid : Humidity or Moisture

Materials to Avoid : Strong acids

Hazardous decomposition products: Reaction with strong acids generates toxic gases (e.g. Sulfur oxide(s)).

11. TOXICOLOGICAL INFORMATION

Acute toxicity : No information available

LD50/LC50 : No information available

Eye Irritation : Irritating to eyes.

Skin Irritation : Irritating to skin.

Sensitization : May cause sensitization by skin contact.

Mutagenity : No information available

Carcinogenicity : No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity : No information available

Persistence and degradability : No information available

Bioaccumulative potential : No information available

Chemical fate information : No information available

13. DISPOSAL CONSIDERATIONS

Dispose of material and/or packaging according to all federal, state and local applicable regulations.

European Waste Catalogue(EWC) : 17 08 02 gypsum-based construction materials other than mentioned in 17 08 01.

14. TRANSPORT INFORMATION

Transport by road/rail (ADR/RID) : Not regulated

Maritime transport (IMDG code) : Not regulated

Inland navigation (ADNR) : Not regulated

Air transport (ICAO/IATA) : Not regulated

This product is not classed as a dangerous good in any transport regulation.

15. REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard symbol : Xi - irritant

Risk phrases :

R36/38 Irritating to eyes and skin.

Safety phrases :

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37/39 Wear suitable globes and eye/face protection

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

SDS Revised Date : September 22, 2004