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Safety Data Sheet

1 Chemical Substance and Company Information

Product

Product Name	CS-21 Builder Auxiliary agent
Product Code	B-7621:2

Manufacturer Information

Company name	Aston Inc.
Address	14-16 Yasakahonmachi, Kita-ku, Okayama-shi, Okayama, Japan
Responsible department	Engineering Department
Telephone number	+81-86-255-1511
Emergency contact number	+81-86-255-1511
FAX number	+81-86-251-3270
E-mail address	aston_2@cs21.jp

Recommended Application and Restrictions on Use

The liquid mixed with CS-21 Builder Main Agent works for surface protection, crack repair and water stop of leakage on the concrete or mortar that contains cement component, etc.

2 Summary of Danger and Toxicity

GHS Classification

Skin corrosion / Irritation	Category 2
Serious damage to the eye / Eye irritation	Category 1
Specific target organ systemic toxicity - single exposure	Category 1

※Those not listed are what are out of the scope or those that cannot be classified.

Label Element

Signal words Danger

Hazard statement
- H315: Skin corrosion
- H318: Serious damage to the eye
- H370: Damage to the organs (the respiratory system)

Precautions for handling

During handling, wear a protective mask, safety glasses, impermeable protective gloves, and an apron.

First-aid measures

In case of adhesion to skin

Flush skin with a large amount of water and soap. If there is inflammation, consult a physician.
Take off the contaminated clothes and wash it before it is used again.

In case of contact with eyes

Irrigate thoroughly with clean water and consult a physician.

In case of inhalation

When sprayed liquid is inhaled, rest in a clean place and consult a physician.

In case when swallowed

Immediately rinse the mouth, take a large amount of water, and consult a physician.

Precautions for storage

Seal and store in an area inaccessible to outsiders and children.
Store indoors to prevent freezing in winter.
Always ensure the container is capped (closed) during storage. Do not store in a location that will expose the container to direct sunlight or in a location where the temperature exceeds 40 °C.

Precautions for disposal

Have authorized contractor(s) dispose of the waste liquid and/or containers after use.

3 Composition and Ingredient Information

Single chemical / Mixture

Mixture

Common name

Auxiliary agent of sodium silicate-based surface penetrant, Auxiliary agent of reactive silicate-based surface penetrant

Alias

Calcium imparting material, Reaction accelerator, Auxiliary agent of concrete renovation

Constituent

Common name	Formula	Content	CAS №
Calcium hydroxide	$Ca(OH)_2$	1～5	1305-62-0
Others	—	Minute amount	—

4 First-aid Measures

In case of adhesion to skin

Take off the contaminated clothes and wash with a large amount of water and soap.
If there is inflammation, consult a physician.

In case of contact with eyes

Irrigate thoroughly with clean water and consult a physician.

In case of inhalation

When sprayed liquid is inhaled, rest in a clean place and consult a physician.

In case of ingestion

Immediately rinse the mouth, take a large amount of water, and consult a physician.

5 Measures in Case of Fire

Fire extinguishing agent

Use the fire extinguishing agent suitable for the fire in the surrounding area.

Fire extinguishing method

In case of a fire in the surrounding area, promptly move the product to a safe place.
If this is not possible, sprinkle water and cool the containers to prevent destruction.
Take necessary measures so that fire extinguishing water, etc. will not spill substances that affect the environment.

Protection for the fire-fighting personnel

A protective mask, safety glasses, impermeable protective gloves, and an apron must be worn.

6 Measures in Case of Leakage

Precautions for human body, protective equipment, and emergency measures

Prohibit unauthorized persons' access to the leakage site, for example by roping off the area.
When dealing with the leakage, wear a protective mask, safety glasses, impermeable protective gloves, and an apron.

Precautions for environment

Take precautions to prevent this discharge into rivers, sewage system, and soil.

Collection and neutralization

Make dry sand, dirt, or incombustibles absorb the leakage and collect in containers that can be sealed.

7 Precautions for Handling and Storage

Handling

Technical measures

When handling, wear a protective mask, safety glasses, impermeable protective gloves, and an apron to avoid inhalation and direct contact with eyes, skin, and clothes.

Local and general ventilation

Implement ventilation as needed.

Precautions

Follow the normal construction process when use.

Precautions for Safety handling

Measures such as curing must be taken so that this product will not adhere to the parts other than where it should be applied by curtaining or scattering.

Sanitary measures

After handling work is finished, wash hands and face and gargle.

Storage

Technical measures

Seal and store in an area inaccessible to outsiders and children.

Storage conditions

Always ensure the container is capped during storage. Do not store in a location that will expose the container to direct sunlight or in a location where the temperature exceeds 40 °C.
Store indoors to prevent freezing in winter.

Containers and Packaging materials

Polyethylene, polypropylene, stainless-steel, etc.

8 Exposure Prevention and Protection Measures

Measures for facilities

Provide water for washing hands and eyes near the handling area.

Exposure limit value

Standard control concentration : No data
Allowable concentration : No data

Protective gear

Respiratory protection : A protective
Hand protection : Impermeable protective gloves
Eye protection : Safety glass
Skin and body protection : An apron

9 Physical and Chemical Properties

Main component	Calcium hydrate
Appearance	White or pale pink liquid
Odor	None
pH value	12.8 - 13.8
Melting temperature	Below 0℃
Boiling temperaure	Approx. 100℃
Flash point	Incombustible
Upper and lower limits of flammable or explosive range	Incombustible
Vapor pressure	No data
Vapor density	No data
Specific gravity	1.01 - 1.05
Solubility	Dissolve in water at an opt
Octanol water partition coefficien	No data
Autoignition temperature	Incombustible
Decomposition temperature	No data
Evaporation rate	No data
Evaporation residue	1.0 - 5.0 wt%

10 Stability and Reactivity

Stability

This product is stable under the normal handling conditions.

Reactivity

This product reacts with silicate and forms gel.
Absorbing carbon dioxide in the air, it becomes calcium carbonate.
When heated, it breaks down into calcium oxide.
Reacting with metals such as aluminum and zinc, it generates hydrogen.

Conditions to avoid

Contact with reactive chemical hazards and fire sources

Reactive chemical hazard substances

Metals such as aluminum, zinc, tin, lead, etc. and strong oxidizing compound, acids

Hazardous decomposition products

Calcium oxides

11 Hazard Statement

About the product:

Acute toxicity	No data
Skin corrosivity and irritation to skin	Irritating when in contact with the skin This product is determined to be Category 2 since its pH value is 12.8 - 13.8.
Serious eye damage or eye irritation	Irritating when in contact with the eyes. This product is determined to be Category 1 since its pH value is 12.8 - 13.8.

About calcium sydrate:

Acute toxicity (Oral)	Not classified based on the LD 50 value of 7340 mg/kg (ACGIH, 2001; HSDB, 2005) of the rats.
Skin corrosivity and irritation to skin	Classified as Category 2 based on the statements that moderate irritation is present when exposed to any of the body surface including eyes and respiratory tract (ACGIH, 7th, 2001) and that moderate, severe, and/or corrosive irritation is present on the human skin (IUCLID, 2000; HSDB, 2005; ICSC (J), 1997: SITTIG, 4th, 2002; HSFS, 2005).
Serious eye damage or eye irritation	Classified as Category 1 based on the statements that moderate, severe, and/or corrosive irritation is present on the human eyes (ACGIH, 7th, 2001; IUCLID, 2000; HSDB, 2005; ICSC (J), 1997; SITTIG, 4th, 2002; HSFS, 2005) and that corrosive irritation is present on the rabbits (IUCLID, 2000).
Specific target organ systemic toxicity - single exposure	Classified as Category 1 (respiratory system) based on the statements that human respiratory system and tracts are stimulated and pulmonary edema can be caused (ACGIH, 7th, 2001; HSDB, 2005; ICSC (J), 1997; SITTIG, 4th, 2002; HSFS, 2005).

12 Environmental Impact Information

Eco toxicity	No data
Perisitence, Decomposability	No data
Bioaccumulativity	No data
Mobility in soil	No data
Hazard to the ozone layer	No data

13 Precautions for disposal

Residual wastes

Contract out the disposal to industrial waste disposal companies approved by the prefectural governors.

Contaminated containers and packcages

Contract out the disposal to industrial waste disposal companies approved by the prefectural governors.

14 Precautions for Transportation

National regulations

Land transportation information	Not applicable
Marine transportation information	Not applicable
UN Number	Not applicable
Marine contaminant	Not applicable
Aviation transportation information	Not applicable
Other precautions	After verifying that contents do not spill out after fastening the cap, package the item in a carton box, indicate top and bottom on the box for transport.

15 Applicable Laws

CSCL Regulation	Existing chemical substance (Calcium hydrate: 1 -181)
PRTR Law	Not applicable
Poisonous and Deleterious Substance Control Law	Not applicable
Industrial Safety and Health Act	Hazardous and dangerous materials requiring notification (Cabinet Order; Article 18-2, Schedule 9-317) Cabinet order name: Calcium hydrate

16 Other Information

Expiration date for use of this product

Consume within six months from shipment.

Cited Reference

Chemical Risk Information Platform (CHRIP), the website of National Institute of Technology and Evaluation (nite)

Note on the entries in this document

The entries in this document are prepared based on the materials and information available at this time. However, since not all literature and information could be examined, there could be omissions. Also, this document is subject to revision due to new knowledge, testing, and so on.
The entries are intended for normal handling. In case of any special handling, implement new safety measures suitable for the specific application and use.

Contact Information for this SDS

Aston Inc.
Engineering Department
14-16 Yasakahonmachi, Kita-ku, Okayama-shi, Okayama, 700-0075, Japan
TEL: +81-86-255-1511
FAX: +81-86-251-3270
E-mail: aston_2@cs21.jp