

Material Safety Data Sheet

MSDS Number : 42010-0

Issue Date : June 8, 1999

1. Chemical Product and Company Identification

SHO-BOND BL-GROUT(S) Base Agent

Company Identification

Distributor

Manufacturer

SHO-BOND KAGAKU CO., LTD.

Resin Products Division, Technology Department

2-8-10, Yoshinodai, Kawagoe-shi, 350-0833, Saitama, Japan

Tel : 81-429-25-5611

Fax : 81-429-25-5616

2. Composition / Information on Ingredients

<u>Hazardous ingredients</u>	<u>percentage</u>	<u>CAS Number</u>
Bisphenol-A glycidyl ether	60-65%	25085-99-8
Bisphenol-F glycidyl ether	13-18%	107028-59-1
Alkyl glycidyl ether	15-20%	16096-31-4

Not contain butyl glycidyl ether.

3. Hazards Identification

Emergency overview

Yellowish brown liquid. Flammable. Contact with skin may cause irritation.

Inhalation may cause poisoning.

Potential health effects

Eyes

May cause eye irritation.

Skin

Skin contact may cause irritation.

Inhalation

High vapor concentrations may be harmful if inhaled.

Ingestion

May be harmful if swallowed.

4. First Aid

Eyes

Flush eyes with plenty of water for 15 minutes if contact occurs. It is also recommended to have medical personnel check your eye, as soon as possible.

Skin

Wipe off with clothes, and wash the contacted parts with soap and warm water. Avoid using organic solvents for washing. If an itch, an inflammation or a pain will occur, get a medical attention.

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

If swallowed, induce vomiting immediately as directed by medical personnel. Get medical attention.

5. Fire Fighting Measures

Method used

Dry chemical powder, carbon dioxide, foam.

Precautions

Shut off all ignition sources. Wear a fire-fighting wear, and fight a fire from windward.

6. Accidental Release Measures

Large spill

Evacuate area. Shut off all source of ignition. Wear appropriate personal protective equipment (gloves, mask or breathing apparatus). Contain the spilled area with sand or sandbags. Collect spilled material in tightly-closed containers. Absorb the residue with

sand, diatomaceous earth or sawdust, and collect in containers for waste disposal.

Small spill

Wear appropriate personal protective equipment (gloves, mask or breathing apparatus), if it is required. Wipe off the spilled material with clothes or rags, and hold in a tightly-closed container for waste disposal.

7. Handling and Storage

Handling

Wear solvent-impervious gloves, and avoid contact with skin and eyes.

Use in a well ventilated area. Keep away from all ignition sources.

Wash thoroughly after handling

BL-GROUT mixture (with BL-GROUT Hardener) is injected into cracks of concrete structures, with high pressure, using BL-INJECTOR. In case of leakage, spouting of the liquid may occur. If exposed, wash immediately with soap and water.

Storage

Do not store in direct sunlight. Store in a cool place.

8. Exposure Controls / Personal Protection

Engineering control

Local exhaust ventilation, an eye wash facility and an safety shower.

Personal protective equipment

Chemical safety goggles, chemical resistant gloves, rubber boots, chemical suit, a NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister.

Exposure guidelines

None of the ingredients is included in the tables of OSHA "Air contaminants" (29 CFR 1910.1000), nor of ACGIH "Recommendations on TLVs".

9. Physical and Chemical Properties

Appearance

Yellow-brownish liquid

Odor

Specific odor. Odor threshold level – unknown

Solubility in water

Insoluble

Evaporation rate

Not determined, however this material is volatile.

10. Stability and Reactivity

Flash point

74 deg. C

Explosion limit

Not determined.

Incompatibility

Mix with BL-GROUT Hardener, ONLY when you use this product, or when you dispose the aged products (Refer Section 13)

Engineering Control

Use explosion-proof electrical (ventilating and lighting) equipment.

11. Toxicological Information

Acute toxicity

No information is available.

Irritation / corrosion

May cause irritation to skin and eyes.

Carcinogenicity

None of ingredients is included in the Monographs of IARC, nor the Annual Report of NTP.

Mutagenicity

Bisphenol-A glycidyl ether is known in Japan, as a mutagen in some in vitro tests.

12. Ecological Information

No information available.

13. Disposal Considerations.

Burn in an incinerator equipped with an afterburner and a scrubber. Or, mix with BL-GROUT Hardener to make a solid, and then landfilled in an approved site.

14. Transport Information

Not a hazardous material for DOT shipping.

15. Regulatory Information

None.

16. Other Information

The information herein is given good faith, but no warranty, expressed or implied, is made. Consult the distributor for further information.

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2. Composition / Information on Ingredients

<u>Hazardous ingredients</u>	<u>percentage</u>	<u>CAS Number</u>
Polyamidoamine	45-50%	68910-90-7
Polyoxypropyleneamine	35-40%	9046-10-0
Alkylphenol	8-12%	25154-52-3

3. Hazards Identification

Emergency overview

Pale yellowish brown liquid, with epecific odor. Flammable. Contact with skin may cause irritation. Inhalation may cause poisoning.

Potential health Effects

Eyes

May cause eye irritation.

Skin

Prolonged or repeated skin contact may cause irritation.

Inhalation

High vapor concentrations may be harmful if inhaled.

Ingestion

May be harmful if swallowed.

4. First Aid

Eyes

Flush eyes with plenty of water for 15 minutes if contact occurs. It is also recommended to have medical personnel check your eye, as soon as possible.

Skin

Wipe off with clothes, and wash the contacted parts with soap and warm water. Avoid using organic solvents for washing. If an itch, an inflammation or a pain will occur, get a medical attention.

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

If swallowed, induce vomiting immediately as directed by medical personnel. Get medical attention.

5. Fire Fighting Measures

Method used

Dry chemical powder, carbon dioxide, form.

Precautions

Wear a fire-fighting wear, and fight a fire from windward.

6. Accidental Release Measures

Large spill

Evacuate area. Shut off all source of ignition. Wear appropriate personal protective equipment (gloves, mask or breathing apparatus). Contain the spilled area with sand or sandbags. Collect spilled material in tightly-closed containers. Absorb the residue with sand, diatomaceous earth or sawdust, and collect in tightly-closed containers for waste disposal.

Small spill

Wear appropriate personal protective equipment (gloves, mask or breathing apparatus), if it is required. Wipe off the spilled material with clothes or rags, and hold in a tightly-closed container for waste disposal.

7. Handling and Storage

Handling

Wear solvent-impervious gloves, and avoid contact with skin and eyes.

Use in a well ventilated area. Keep away from all ignition sources.

Wash thoroughly after handling.

BL-GROUT mixture (with BL-GROUT Base Agent) is injected into cracks of concrete structures, with high pressure, using BL-INJECTOR. In case of leakage, spouting of the liquid may occur. If exposed, wash immediately with soap and water.

Storage

Do not store in direct sunlight. Store in a cool place.

8. Exposure Controls / Personal Protection

Engineering control

Local exhaust ventilation, an eye wash facility and an safety shower.

Personal protective equipment

Chemical safety goggles, chemical resistant gloves, rubber boots, chemical suit, a NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister.

Exposure guidelines

None of the ingredients is included in the tables of OSHA "Air contaminants" (29 CFR 1910.1000), nor of ACGIH "Recommendations on TLVs".

9. Physical and Chemical Properties

Appearance

Pale yellow-brownish liquid

Odor

Specific odor. Odor threshold level – unknown

Solubility in water

Hardly insoluble

Evaporation rate

Not determined, however this material is slightly volatile.

10. Stability and Reactivity

Flash point

124 deg. C

Incompatibility

Mix with BL-GROUT Base Agent, ONLY when you use this product, or when you dispose the aged products (Refer Section 13)

Engineering Control

Use explosion-proof electrical (ventilating and lighting) equipment.

11. Toxicological Information

Acute toxicity

No information is available.

Irritation / corrosion

May cause irritation to skin and eyes.

Carcinogenicity

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14. Transport Information

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16. Other Information

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