

**BOSSIL TECHNOLOGY SDN. BHD.****Safety Data Sheet****BS-8440
Cementitious Waterproofing**

Issued date: 23/12/16

Revision date: -

Revision No.: 0

1. Identification of the substance/preparation and of the company/undertaking**Product name** : BS-8440 Cementitious Waterproofing**Product use** : Waterproofing material**Company** : Bossil Technology Sdn. Bhd.
22A-1, Jalan Tasik Utama 10,
The Trillium @ Lake Fields,
Sg. Besi, 57000 Kuala Lumpur,
Malaysia.**Telephone** : +6016 - 2119190**Fax** : -**Email** : sales@bossil.com**Website** : www.bossil.com**2. Hazard(s) identification****Substance/Mixture** : Mixture**Hazard classification** : Skin Irrit.2

Skin Sens.1




Eye Irrit.2

**Pictogram** : GHS07 Exclamation mark**Signal word** : Warning**Hazard statement(s):**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary statement(s):

P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with soap and water.
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

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P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.

Other hazards which do not result in classification but contribute to overall hazards: None known

3. Composition/Information on ingredients

Chemical name	CAS No.	EINECS No.	%
Ordinary Portland Cement	65997-15-1	266-043-4	30 - 50
Silica sand	14808-60-7	238-878-4	30 - 50
Limestone	1317-65-3	215-279-6	10 - 30

4. First-aid measures

In case of inhalation:

Remove to fresh air, keep warm and at rest. Contact physician if symptom persists.

In case of skin contact:

Remove contaminated clothing. Rinse with copious amount of water and soap. Get medical advice if skin irritation or a rash occurs. Wash clothing before reuse.

In case of eye contact:

Do not rub eyes. Contact lenses should be removed. Rinse with copious amount of water immediately. Seek medical advice if eye irritation develops and persists.

In case of ingestion:

DO NOT induce vomiting. Rinse mouth thoroughly with water. Get medical attention if a symptom persists.




Personal protection equipment for first-aiders:

Pay attention to any potential hazards and use recommended personal protection equipment if potential for exposure exists.

Most important symptoms and effects, acute and delayed:

May cause skin and eye irritation. May cause an allergic skin reaction.

5. Fire-fighting measures

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Suitable extinguishing media:

Alcohol-resistant foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media:

None known.

Specific firefighting procedures:

Remove undamaged containers from fire area if it is safe to do so. Use extinguishing media that is suitable to local circumstances and surrounding environment.

Special person protection equipment for firefighters:

NIOSH-approved self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific hazards arising from firefighting:

Exposure to combustion products may be a hazard to health.

Thermal decomposition products:

Oxides of carbon.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedure:

Use recommended personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Measure for cleaning/collecting:

Wipe or soak with inert liquid binding material (sand, sawdust, etc.). Scrape away cured material. Dispose the spilt material according to local or national regulations. Section 13 of this safety data sheet provides information regarding certain local or national requirements.

Additional information:

Prevent spillage from entering drainage/sewer systems. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

7. Handling and storage

Handling:

Ensure good ventilation during use. Avoid contact with skin and eyes. Do not eat, drink, or smoke when using the product.

Storage:

Ensure containers and cartridges are tightly closed. Store in a dry, well-ventilated area, and protected from direct sunlight with temperature not exceeding 30 °C. Keep away from incompatibles. Refer to section 10 for incompatible materials.

8. Exposure controls/personal protection

Components	CAS No.	Form of exposure (Value type)	Control Parameter	Basis
Ordinary Portland Cement	65997-15-1	8 hours TWA (Particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³	Malaysia OSHA

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Ordinary Portland Cement (total dust)	65997-15-1	8 hours TWA	15 mg/m ³	US OSHA
Ordinary Portland Cement (inhalable dust)	65997-15-1	8 hours TWA (Particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³	UK WEL
Ordinary Portland Cement (respirable dust)	65997-15-1	8 hours TWA (Particulate matter containing no asbestos and <1% crystalline silica)	4 mg/m ³	UK WEL
Ordinary Portland Cement	65997-15-1	8 hours TWA (Particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³	Safe Work Australia
Limestone	1317-62-3	8 hours TWA (Particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³	Malaysia OSHA
Limestone (total dust)	1317-62-3	8 hours TWA	10 mg/m ³	US OSHA
Limestone (respirable fraction)	1317-62-3	8 hours TWA	5 mg/m ³	US OSHA
Limestone (inhalable dust)	1317-62-3	8 hours TWA	10 mg/m ³	UK WEL
Limestone (respirable dust)	1317-62-3	8 hours TWA	4 mg/m ³	UK WEL
Limestone	1317-62-3	8 hours TWA (Particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³	Safe Work Australia

Engineering controls:

Product curing may form hazardous compounds. Ensure adequate ventilation and minimise workplace exposure concentrations.

Industrial hygiene:

Remove immediately all contaminated clothing. Do not inhale vapour. Wash hands and contaminated areas with water and soap before leaving the work site. Change clothing before leaving workplace and wash before reuse. Do not eat, drink, or smoke while using product.




Hand protection:

Suitable impervious protective gloves (latex, nitrile, etc.). Breakthrough time is not tested for this product. Change gloves often if possible.

Respiratory protection:

A NIOSH-approved respirator with filter for organic vapours is recommended where local ventilation is not adequate.

Eye/Face protection:

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Protective goggles/safety glasses.

9. Physical and chemical properties

Appearance	: Powder
Odour	: Not applicable
Odour threshold	: Not determined
pH	: Not determined
Freezing/Melting point	: Not determined
Boiling point range	: Not applicable
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability	: Not classified as flammable
Explosive properties	: Not classified as explosive
Oxidising properties	: Not classified as oxidising
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: Not determined
Solubility in water	: Soluble in water
N-octanol/water partition coefficient	: Not determined
Decomposition temperature	: Not determined
Viscosity	: Not applicable

10. Stability and reactivity

Reactivity:

No reactive hazards known.

Stability:

Stable under recommended handling and storage conditions.

Conditions to avoid:

None known.

Hazardous reactions:

During normal storage, hazardous decomposition will not occur. At higher temperatures, decomposition products depend on the temperature, air supply and presence of other materials. Irritant gas and vapours will be produced.

Hazardous decomposition products:

None known.

Incompatible materials:

None known.

11. Toxicology information

No specific oral, inhalation or dermal toxicology data is known for this product. Any toxicological data included in this section is based on the data associated with the components.

Acute oral toxicity, LD₅₀ (rat):

Not classified based on available information and/or concentration of components.

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Limestone	>2,000 mg/kg
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Acute dermal toxicity, LD₅₀ (rabbit):

Not classified based on available information and/or concentration of components.

Acute inhalation toxicity, LC₅₀ (6 hours, rat):

Not classified based on available information and/or concentration of components.

Serious eye damage/eye irritation:

Classified as an eye irritant.

Ordinary Portland Cement	Causes eye irritation.
Limestone	Not eye irritant.

Skin corrosion/skin irritation:

Classified as a skin irritant.

Ordinary Portland Cement	Causes skin irritation.
Limestone	Not skin irritant.

Respiratory/Skin sensitisation:

Not classified as respiratory sensitiser, but may cause an allergic skin reaction.

Ordinary Portland Cement	Sensitising on skin.
Limestone	Not sensitising on skin.

Germ cell mutagenicity:

Not classified based on available information and/or concentration of components.

Limestone	Negative genotoxicity <i>in vitro</i> .
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Carcinogenicity:

Not classified based on available information and/or concentration of components.

Reproductive toxicity:

Not classified based on available information and/or concentration of components.

Specific target organ toxicity – single exposure:

Not classified based on available information and/or concentration of components.

Specific target organ toxicity – repeated exposure:

Not classified based on available information and/or concentration of components.

Limestone	Exposure for 6 weeks by ingestion on rats. NOAEL: 1,000 mg/kg
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Aspiration toxicity:

Not classified based on available information and/or concentration of components.

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Likely route of administration:

Skin contact and ingestion.

12. Ecological information

Individual components of this mixture have been independently tested by the raw material suppliers and any known results have been presented below. The results for the individual components may not be representative of the ecological toxicity of this finished product. This finished product has not been tested to determine individual toxicological/ecological limits.

Ecology toxicity:

No adverse effect on aquatic organisms is predicted based on available information and/or concentration of components.

Limestone Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	Exposure for 96 hours, LC ₅₀ : >100 mg/L Exposure for 48 hours, EC ₅₀ : >100 mg/L Exposure for 72 hours, EC ₅₀ : >14 mg/L
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Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

13. Disposal information

Waste treatment/disposal methods - unused products

Waste disposal must be in compliance with environmental protection requirements and local regulations.




Waste treatment/disposal methods - contaminated packaging

Dispose of as unused product. Empty container should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

Road transport (UNRTDG) : Not regulated as dangerous goods.
UN number : Not applicable
Proper shipping name : Not applicable
Technical name : Not applicable
Hazard class : Not applicable
Classification code : Not applicable
Packing group : Not applicable

Marine transport (IMDG) : Not regulated as dangerous goods.
UN number : Not applicable
Proper shipping name : Not applicable
Technical name : Not applicable
Hazard class : Not applicable
EmS : Not applicable

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Packing group	: Not applicable
Marine pollutant	: Not applicable
<u>Air transport (IATA)</u>	: Not regulated as dangerous goods.
UN number	: Not applicable
Proper shipping name	: Not applicable
Technical name	: Not applicable
Hazard class	: Not applicable
Packing group	: Not applicable

15. Regulatory information

Safety, health, and environmental regulations specific for the hazardous chemical in question:

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2010 (Malaysia)

Occupational Safety and Health (Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (Malaysia)

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (European Union)

Occupational Safety and Health Administration (OSHA) (2006) Air Contaminants. 29 CFR 1910.1000 (United States of America)

Work Health and Safety Act 2011 (Australia)

EH40/2005 Workplace exposure limits (United Kingdom)

Chemical inventory status:

Canada DSL/NDSL : All ingredients listed or exempt.





United States TCSA : All ingredients listed or exempt.

16. Other information

Definitions:

TWA	: Time-weighted average.
STEL	: Short-term exposure level.
OSHA	: Occupational Safe and Health Act
WEL	: Workplace exposure limits
LD₅₀	: The minimum dose required for lethal effects in 50% of a given population of test specimens.
ppm	: part per million
bw	: body weight
NIOSH	: National Institute for Occupational Safety and Health.
UNRTDG	: United Nations Recommendations on the Transport of Dangerous Goods
IMDG	: International Maritime Dangerous Goods
IATA	: International Air Transport Association
DSL	: Domestic Substance List
NDSL	: Non-domestic Substances List
TSCA	: Toxic Substances Control Act.

All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The details contained herein are based on our present state of knowledge and experience in characterising our product with regard to any possible




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safety requirement at the date of its publication. We do, however, pass them on without any warranty or property assurances.

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1. Identification of the substance/preparation and of the company/undertaking

Product name : VT-440 VitalShield (Part B)
Product use : Waterproofing material
Company : Vital Technical Sdn. Bhd.
 No. 93, Jalan Industri 3/3,
 Rawang Integrated Industrial Park,
 48000 Rawang, Selangor,
 Malaysia.

Telephone : +603 - 6092 0000
Fax : +603 - 6092 0099
Email : sales@vitaltechnical.com
Website : http://www.vitaltechnical.com

2. Hazard(s) identification

Substance/Mixture : Mixture
Pictogram : Not classified as hazardous
Signal word : Not classified as hazardous
Hazard Statement(s) : Not classified as hazardous
Precautionary Statement(s) : Not classified as hazardous

Other hazards which do not result in classification but contribute to overall hazards: None known

3. Composition/Information on ingredients

Does not contain hazardous ingredients based on available information and/or concentration of components.

4. First-aid measures

In case of inhalation:

Remove to fresh air, keep warm and at rest. Contact physician if symptom persists.

In case of skin contact:

Remove contaminated clothing. Rinse with copious amount of water and soap. Get medical advice if skin irritation or a rash occurs. Wash clothing before reuse.

In case of eye contact:

Contact lenses should be removed. Rinse with copious amount of water immediately. Seek medical advice if eye irritation develops and persists.

In case of ingestion:




DO NOT induce vomiting. Rinse mouth thoroughly with water. Get medical attention if a symptom persists.

Personal protection equipment for first-aiders:

Pay attention to any potential hazards and use recommended personal protection equipment if potential for exposure exists.

Most important symptoms and effects, acute and delayed:

None known.

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5. Fire-fighting measures

Suitable extinguishing media:

Water, alcohol-resistant foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media:

None known.

Specific firefighting procedures:

Remove undamaged containers from fire area if it is safe to do so. Use extinguishing media that is suitable to local circumstances and surrounding environment.

Special person protection equipment for firefighters:

NIOSH-approved self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific hazards arising from firefighting:

Exposure to combustion products may be a hazard to health.

Thermal decomposition products:

Oxides of carbon.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedure:

Use recommended personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Measure for cleaning/collecting:

Wipe or soak with inert liquid binding material (sand, sawdust, etc.). Scrape away cured material. Dispose the spill material according to local or national regulations. Section 13 of this safety data sheet provides information regarding certain local or national requirements.

Additional information:

Prevent spillage from entering drainage/sewer systems. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

7. Handling and storage

Handling:

Ensure good ventilation during use. Avoid contact with skin and eyes. Do not eat, drink, or smoke when using the product.




Storage:

Ensure containers and cartridges are tightly closed. Store in a dry, well-ventilated area, and protected from direct sunlight with temperature not exceeding 30 °C. Keep away from incompatibles. Refer to section 10 for incompatible materials.

8. Exposure controls/personal protection

Engineering controls:

Product curing may form hazardous compounds. Ensure adequate ventilation and minimise workplace exposure concentrations.

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Industrial hygiene:

Remove immediately all contaminated clothing. Do not inhale vapour. Wash hands and contaminated areas with water and soap before leaving the work site. Change clothing before leaving workplace and wash before reuse. Do not eat, drink, or smoke while using product.

Hand protection:

Suitable impervious protective gloves (latex, nitrile, etc.). Breakthrough time is not tested for this product. Change gloves often if possible.

Respiratory protection:

A NIOSH-approved respirator with filter for organic vapours is recommended where local ventilation is not adequate.

Eye/Face protection:

Protective goggles/safety glasses.

9. Physical and chemical properties

Appearance	: White liquid
Odour	: Slight ammonia odour
Odour threshold	: Not determined
pH	: 8 - 9
Freezing/Melting point	: Not determined
Boiling point range	: Not applicable
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability	: Not classified as flammable
Explosive properties	: Not classified as explosive
Oxidising properties	: Not classified as oxidising
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: Approx. 1.00
Solubility in water	: Soluble in water
N-octanol/water partition coefficient	: Not determined
Decomposition temperature	: Not determined
Viscosity	: Not applicable

10. Stability and reactivity

Reactivity:

No reactive hazards known.

Stability:

Stable under recommended handling and storage conditions.




Conditions to avoid:

None known.

Hazardous reactions:

During normal storage, hazardous decomposition will not occur. At higher temperatures, decomposition products depend on the temperature, air supply and presence of other materials. Irritant gas and vapours will be produced.

Hazardous decomposition products:

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None known.

Incompatible materials:

None known.

11. Toxicology information

No specific oral, inhalation or dermal toxicology data is known for this product. Any toxicological data included in this section is based on the data associated with the components.

Acute oral toxicity, LD₅₀ (rat):

Not classified based on available information and/or concentration of components.

Acute dermal toxicity, LD₅₀ (rabbit):

Not classified based on available information and/or concentration of components.

Acute inhalation toxicity, LC₅₀ (6 hours, rat):

Not classified based on available information and/or concentration of components.

Serious eye damage/eye irritation:

Not classified based on available information and/or concentration of components.

Skin corrosion/skin irritation:

Not classified based on available information and/or concentration of components.

Respiratory/Skin sensitization:

Not classified based on available information and/or concentration of components.

Germ cell mutagenicity:

Not classified based on available information and/or concentration of components.

Carcinogenicity:

Not classified based on available information and/or concentration of components.

Reproductive toxicity:

Not classified based on available information and/or concentration of components.

Specific target organ toxicity – single exposure:

Not classified based on available information and/or concentration of components.

Specific target organ toxicity – repeated exposure:

Not classified based on available information and/or concentration of components.

Aspiration toxicity:




Not classified based on available information and/or concentration of components.

Likely route of administration:

Skin contact and ingestion.

12. Ecological information

Individual components of this mixture have been independently tested by the raw material suppliers and any known results have been presented below. The results for the individual components may not be representative of the ecological toxicity of this finished product. This finished product has not been tested to determine individual toxicological/ecological limits.

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Ecology toxicity:

No adverse effect on aquatic organisms is predicted based on available information and/or concentration of components.

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

13. Disposal information

Waste treatment/disposal methods - unused products

Waste disposal must be in compliance with environmental protection requirements and local regulations.

Waste treatment/disposal methods - contaminated packaging

Dispose of as unused product. Empty container should be taken to an approved waste handling site for recycling or disposal.

14. Transport information




Road transport (UNRTDG) : Not regulated as dangerous goods.
UN number : Not applicable
Proper shipping name : Not applicable
Technical name : Not applicable
Hazard class : Not applicable
Classification code : Not applicable
Packing group : Not applicable

Marine transport (IMDG) : Not regulated as dangerous goods.
UN number : Not applicable
Proper shipping name : Not applicable
Technical name : Not applicable
Hazard class : Not applicable
EmS : Not applicable
Packing group : Not applicable
Marine pollutant : Not applicable

Air transport (IATA) : Not regulated as dangerous goods.
UN number : Not applicable
Proper shipping name : Not applicable
Technical name : Not applicable
Hazard class : Not applicable
Packing group : Not applicable

15. Regulatory information

Safety, health, and environmental regulations specific for the hazardous chemical in question:

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Work Health and Safety Act 2011 (Australia)

EH40/2005 Workplace exposure limits (United Kingdom)

Chemical inventory status:

Canada DSL/NDSL : All ingredients listed or exempt.

United States TCSA : All ingredients listed or exempt.

16. Other information

Definitions:

- TWA** : Time-weighted average.
- STEL** : Short-term exposure level.
- OSHA** : Occupational Safe and Health Act
- WEL** : Workplace exposure limits
- LD₅₀** : The minimum dose required for lethal effects in 50% of a given population of test specimens.
- ppm** : part per million
- bw** : body weight
- NIOSH** : National Institute for Occupational Safety and Health.
- UNRTDG** : United Nations Recommendations on the Transport of Dangerous Goods
- IMDG** : International Maritime Dangerous Goods
- IATA** : International Air Transport Association
- DSL** : Domestic Substance List
- NDSL** : Non-domestic Substances List
- TSCA** : Toxic Substances Control Act.

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