MATERIAL SAFE DATA SHEET

1 Product and company identification

Trade name : MULSIFIX BRUSHCOAT HF (POWDER COMPONENT ONLY)

Company : AGE INDUSTRIES & TRADING SDN BHD No. 67, Jalan 30A/119, Taman Taynton View, 56000 Kuala Lumpur. Telephone no.: 60 3 9130 7563

Use : The product is intended for use in the building and construction industry and should be used only by trained personnel.

2 Composition

A blend of Portland cement (CAS no. 65997-15-1) graded silica sands (CAS no. 14808-60-7) together with small quantities of other additives.

3 Hazards identification

Mixing with water or contact of powder with body fluids produces a strongly alkaline solution. This may cause serious burns and ulceration both to the skin and eyes

4 First aid measures

Skin contact	Wash the affected area thoroughly with soap and water. If irritation continues seek medical advice. Clothing contaminated with wet product should be removed and washed thoroughly before re-use.
Eye contact	Wash eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice without delay.
Inhalation	Move affected person to fresh air. If nose or airways become inflamed seek medical attention.
Ingestion	If swallowing has occurred do not induce vomiting. Give person plenty of water to drink. Seek medical attention.

5 Fire fighting measures

The product is not flammable and will not facilitate combustion of other materials.

Exposure hazards

Do not release water contaminated with cement-based products into surface water drains.

6 Accidental release measures

Personal precautions

Avoid contact with skin, eyes and clothing. Avoid breathing dust.

Environmental precautions

Prevent contamination of surface water.

Methods for cleaning

Recover spillage in dry state if possible. Minimise generation of airborne dust. The product can be slurried with water. Keep children away from clean-up operations. Dispose to a place authorized to accept builders' waste. Small quantities can be disposed of as normal household waste.

7 Handling and storage

Handling

When handling bags which weigh 25kg, due regard should be paid to '*Manual Handling Operations Regulations 1992*.

Some bags may have a small amount of cement dust on their outer surface. Appropriate personal protection should be used whilst handling.

Storage

Bags should be stacked in a safe and stable manner. Store in dry conditions.

8 Exposure controls and personal protection

Technical protective measures

No special measures required.

Exposure limits

Occupational Exposure Standard (OES) Limits 8 hour TWA (According to EH40/95).

The product contains powders which if handled carelessly can raise dust.

The personal exposure to such dusts (cement, silica sand, etc.) must be kept below 10mg/m³ 8 hour TWA total inhalable dust and 3mg/m³ respirable dust.

The product may contain small amount of microsilica which is an amorphous form of silica. The personal exposure level to amorphous silica must be kept below 6mg/m³ 8 hour TWA total inhalable dust and 3mg/m³ respirable dust.

Some sands and other fillers may contain small quantities of respirable silica for which the personal exposure must be kept below 0.4mg/m³ 8 hour TWA. If care is taken not to rise dust and the exposure levels for nuisance dusts are not exceeded, the levels for respirable silica should be very low.

Amorphous silica	Total inhalable dust	: 6mg/m ³ .
	Rspirable dust	: 3mg/m ³ .
Portland cement	Total inhalable dust	: 10mg/m ³ .
	Respirable dust	: 4mg/m ³ .

Respiratory protection

Suitable respiratory protection should be worn to ensure that personal OES is not exceeded. If care is taken not to raise dust during handling the use of respirators is not normally necessary.

Hand protection

Wear suitable gloves.

Eye protection

Suitable goggles or face protection should be worn wherever there is a risk of product powder or product/water mixture entering the eye.

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Skin protection

Wear overalls and closed footwear.

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Physical state Particle size Specific gravity $(H_2O = 1)$ pH Boiling point (°C) Melting point (°C) Vapour pressure (mm Hg) Vapour density (Air = 1) Evaporation rate (Butyl Acetate = 1) Solubility in water Odor	Particulate 5 – 600 micron 2.7 pH of wet cement : 12 – N/A N/A N/A N/A N/A None Negligible No ordor
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10 Stability and reactivity

Stable under normal room temperature storage conditions. Bags will set solid if continually soaked with water.

11 Toxicological information

Eye contact	Cement constituent is severe eye irritant. Mild exposures can cause soreness. Gross exposures or untreated mild-exposures can lead to chemical burning and ulceration of the eye.
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- **Skin contact** The powder or product/water mixture may cause irritation, contact dermatitis or allergic dermatitis and/or burns.
- **Inhalation** Inhalation of the powder may cause inflammation of mucous membranes.
- **Ingestion** The swallowing of small amounts of product or product/water mixtures is unlikely to cause any significant reaction. Larger doses may result in irritation to the gastro intestinal tract.

12 Ecological information

Aquatic toxicity rating

LC50 aquatic toxicity rating has not been determined. The addition of any cement-based product to water may, however, cause the pH to rise and therefore may be toxic to aquatic life in some circumstances. No other specific information available.

13 Disposal

Dispose of empty bags or surplus product to a place authorized to accept builders' waste. Keep out of reach of children. Small numbers of bags can be disposed of as normal household waste.

14 Transport information

Classification for Transport not required.

15 **Regulatory information** Symbols Xi Irritant. **R** Phrases R36/37/38 Irritating to eyes, respiratory system and skin. S Phrased S22 Do not breathe dust. After contact with skin, wash immediately with plenty of soap and water. S28 Incase of contact with eyes, rinse immediately with plenty of water and seek S26 medical attention. S24/25 Avoid contact with skin and eyes. S37/39 Wear suitable gloves and eye/face protection.

Keep out reach of children.

16 Other information

None.

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MATERIAL SAFE DATA SHEET

1 Product and company identification

Trade name : MULSIFIX BRUSHCOAT HF (LIQUID COMPONENT ONLY)

Company : AGE INDUSTRIES & TRADING SDN BHD No. 67, Jalan 30A/119, Taman Taynton View, 56000 Kuala Lumpur. Telephone no.: 60 3 9130 7563

Use : The product is intended for use in the building and construction industry and should be used only by trained personnel.

2 Composition

The product is based on aqueous polymer dispersions and other additives.

3 Hazard information

Essentially non hazardous. The product may be mildly irritating to eyes and skin.

4 First aid measures

Skin contactWash off with plenty of soap and water. Do not use organic solvents. Seek
medical advice if irritation persists.Eye contactRinse with plenty of clean water. Seek medical advice if irritation persists.InhalationMove affected person to fresh air.IngestionThere is no serious hazard. Rinse mouth with water. If swallowing has occurred
the affected person should drink plenty of water. Seek medical advice.

5 Fire fighting measures

The wet products will not burn. Dried films are combustible. Water, foam, carbon dioxide or dry powder extinguishers are all suitable.

Exposure hazards

Do not release chemically contaminated water into drains, soil or surface water. Sufficient measures must be taken to retain water used for extinguishing. Dispose of contaminated water and soil according to local regulations.

6 Accidental release measures

Personal precautions

Avoid contact with skin, eyes and clothing.

Environmental precautions

Prevent contamination of soil, drains and surface water.

Methods for cleaning

Take up with absorbent, dry inert material (e.g. sand) and place in a suitable and closable container for disposal according to local regulations.

7 Handling and storage

Handling

The product should be handled in accordance with good industrial safety and hygiene practices.

Storage

Store in original undamaged containers securely closed. Store at room temperature away from direct sunlight. Protect from frost.

8 Exposure controls/personal protection

Technical protective measures

No special measures required.

Exposure limits

None

Respiratory protection

Not normally necessary. Work in well ventilated area.

Hand protection Wear suitable gloves.

wear suitable gloves.

Eye protection

Wear suitable goggles or face protection.

Skin protection

Wear overalls.

9 Physical and chemical properties

Appearance: Milky white liquid.

Odour: slight characteristic of the particular product.

10 Stability and reactivity

The product is stable under normal conditions of use.

11 Toxicological information

Long term experience of handling these types of products based on aqueous polymer dispersions under industrial conditions indicates the absence of any chronic or acute effects.

12 Ecological information

The product is totally miscible with water. Prevent contamination of soil, drains or surface water. No other specific information available.

13 Disposal considerations

The product is not classified as hazardous waste but residues should not be discharged to drains without prior consent. Existing local regulations must always be complied with.

14 Transport information

The product is not classified as hazardous for transportation.

15 Regulatory information

EC Hazard Classification: none.

16 Other information

None

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