

Material Safety Data Sheet

First Issue : October 8, 2010
Revised : October 25, 2010

1. Identification of the substance

Products Name : Concentrated Pretreatment Agent F8076
Company Name : **BROTHER INDUSTRIES, LTD.**
Address : 1-5, Kitajizoyama, Noda-cho, Kariya 448-0803, Japan

2. HAZARDS IDENTIFICATION

EMERGENCY OVER VIEW

: Irritating to eyes.

This product is classified as dangerous preparation according to European Directives 67/548/EEC and 1999/45/EC for the classification, packaging and labelling of dangerous substances and preparations.

POTENTIAL HEALTH EFFECTS

Inhalation : May be harmful if inhaled.

Eye : May cause irritation, tearing and reddening

Skin : May cause skin irritation and /or sensitization.
(Upon prolonged or repeated contact may cause skin irritation and /or sensitization.
The product contains preservative less than 0.06% which causes sensitization.)

Ingestion : Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort.

POTENTIAL ENVIRONMENTAL EFFECTS

Not available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical nature: water based mixture

<u>Hazardous components</u>	<u>CAS-No</u>	<u>Conc.%</u>	<u>Hazard Symbol</u>	<u>Risk phrases</u>
Calcium nitrate tetrahydrate (1)	13477-34-4	25-30	Xi	36/38
Calcium Chloride (1)	10043-52-4	5-10	Xi	36
Diethylene Glycol (1)	111-46-6	5-10	Xn	22

- (1) Substances presenting a health hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.
- (2) OSHA hazardous according to 29 CFR 1910.1200
- (3) Subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

4. FIRST-AID MEASURES

Inhalation	:Remove to fresh air. Get medical attention if necessary.
Eye	:Gently rinse the affected eye(s), including under the eyelids, with clean water for at least 15 minutes. If irritation persists, get medical attention.
Skin	:Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible, cutting them off if necessary .Wash the affected areas under tepid running water using a mild soap. If irritation persists, get medical attention.
Ingestion	:Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flammable properties	: This product is water based and does not sustain burning.
Extinguishing media	: None.
Fire fighting instructions	: None.

6. ACCIDENTAL RELEASE MEASURES

Land spill	: Small spills could be flushed with large quantities of water. Larger spills should be collected for disposal.
Water spill	: Do not allow to enter soil, waterways or waste water canal. Larger spills should be collected for disposal.

7. HANDLING AND STORAGE

Handling	:Use proper protective equipment.
Storage	:Keep containers tightly closed. Avoid leaking, rolling or dropping.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

components

OSHA : PEL

ACGIH : TLV

Exposure controls

occupational exposure controls

Engineering controls	: Not required in normal works.
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Personal protection

Respiratory Protection	:Not required in normal works.
Hand protection	:Protective impervious gloves are recommended.
Eye protection	:Splash proof goggles are recommended.
Skin protection	:Remove soiled or soaked clothing immediately.

Environmental exposure controls

Treatment of effluent containing the product should be done in compliance with regulation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:Water-based liquid with slight odor
pH	:4~6
Boiling point (°C)	:>100°C
Melting Point	:No Data
Flash point (°C)	:None
Auto ignition temperature	: No Data
Flammability limits (vol-%)	: No Data
Specific Gravity(H₂O=1) (g/cm³)	:1.1~1.4
Solubility in water (g/l, 20 °C)	:Infinite
Vapor Density(AIR=1)	: No Data

10. STABILITY AND REACTIVITY

Conditions to avoid	:Not applicable
Stability	:Stable under normal conditions.
Materials to avoid	:Avoid strong oxidizing agents.
Hazardous reactions/decomposition products:	Not available

11. TOXICOLOGICAL INFORMATION

Acute toxicity	: No product data
Sensitization	: Upon prolonged or repeated contact can cause skin irritation and /or sensitization. The product contains preservative less than 0.06% which causes sensitization.

12. ECOLOGICAL INFORMATION

Ecotoxicity	: Not available
Mobility	: This product is water soluble.
Persistence and biodegradability	: Not available
Bioaccumulative potential	: Not available
Remarks	: Do not allow to enter soil, waterways or waste water canal.

13. DISPOSAL CONSIDERATIONS

Waste disposal must be made in compliance with applicable local, state and country regulations.

14. TRANSPORT INFORMATION

UN. CLASS	:Not applicable
UN. No.	:Not applicable
Packing Group	:Not applicable
Transportation Practice	:Any transportation practice must be done in compliance with law and regulation.

15. REGULATORY INFORMATION

Regulatory information with regard to this product in your country or region should be examined by your own responsibility.

Classification and labeling

This product is classified as dangerous preparation according to European Directives 67/548/EEC and 1999/45/EC for the classification, packaging and labelling of dangerous substances and preparations.

Hazard symbol:	Xi
Risk phrases:	R36/38 <i>R 36/38 Irritating to eyes and skin.</i>
Safety phrases:	S22,S24/25,S26,S28,S36/37/39/S45,S46 <i>S 22 Do not breathe dust.</i> <i>S 24/25 Avoid contact with skin and eyes.</i> <i>S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</i> <i>S 28 After contact with skin, wash immediately with plenty of water.</i> <i>S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.</i> <i>S 45 In case of accident or if you feel unwell, seek medical advice immediately.</i> <i>S 46 If swallowed, seek medical advice immediately and show container or label.</i>

16. OTHER INFORMATION

The information on this sheet is not a specification, it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon



our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.