MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product Name: **STRIPOL**

Supplier: **SNF (UK) LIMITED**
Solutions House, Ripley Close,
Normanton Industrial Estate
Normanton, WF6 1TB.

Telephone Number: +44 (0) 1924 311000 **Fax:** +44 (0) 1924 311099

Product Use: **Polyelectrolyte cleaner**.

2. HAZARDS IDENTIFICATION

Harmful in contact with skin and if swallowed. Irritating to eyes and skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical	CAS	EINECS	Classification	Concentration
2-aminoethanol	141-43-5	205-483-5	X_n: R20, R36/37/38	≥ 0.5% and <2.50%
2-Butoxyethanol	111-76-2	203-905-0	X_n: R20/21/22, R36/38	≥ 5.0% and < 10.0%
Sodium metasilicate	6834-92-0	229-912-9	X_i: R36/38	≥ 5.0% and < 10.0%

Other ingredients include: Aqua, sequestrants, dye and wetting agents.

4. FIRST AID MEASURES

General: Immediate medical attention is sought, if swallowed. An eye wash bottle should be made available where this product is used.

Eye Contact:	Promptly wash eyes with plenty of cold water. Continue to rinse for at least 15 minutes and *Get Medical Attention*.
Skin Contact:	Flush contaminated skin with plenty of cold running water. Promptly remove clothing if soaked through and flush skin with water and wash clothing before reuse.
Inhalation	Move the exposed person to fresh air at once. If required, provide artificial respiration. Keep patient warm and consult doctor if symptoms persist.
Ingestion:	***Call Doctor immediately***. **DO NOT** induce vomiting. Rinse mouth; then immediately drink 1-2 large glasses of water or milk. Never give any thing by mouth to an unconscious person.
Immediate treatment/antidote:	Symptomatic treatment

5. FIRE-FIGHTING MEASURES

Suitable extinguishers:	Aqueous solution. Will not support combustion. Water spray
Hazardous combustion products:	At elevated temperatures forms flammable and explosive hydrogen through corrosion of metals and mixture of harmful fumes and acrid gases.
Special equipment for fire fighting:	Wear self-contained breathing apparatus. Wear protective clothing to avoid contact with skin and eyes.
Suitable extinguishers:	Aqueous solution. Will not support combustion. Water spray
Hazardous combustion products:	At elevated temperatures forms flammable and explosive hydrogen through corrosion of metals and mixture of harmful fumes and acrid gases.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Exclude non-essential personnel from area. Wear appropriate protective clothing. No eating or smoking.
Environmental precautions:	Contain spill. Soak up with inert absorbent. Transfer resulting mixture to suitable containers and seal. Dispose of in accordance with applicable regulations.
Methods for cleaning up:	Neutralise spill area by careful addition of acid (dilute solution – Hydrochloric acid). Flush area with plenty of cold water to drain, diluting greatly with water. Advise water authority if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

7. HANDLING AND STORAGE

Handling conditions:	Harmful. Wear protective clothing, rubber gloves and goggles/face shield when handling this product and its solutions.
Storage conditions	Keep from freezing. If frozen, storage in warm area should restore product to its original state. Good general ventilation. LEV may be required to ensure Occupational exposure limit is not exceeded.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Controls

INGREDIENT NAME	OES/MEL	Long term exposure limits	Short term exposure limits
2-aminoethanol	OES	**7.6 mg/m^3**	**15 mg/m^3**
2-Butoxyethanol	OES	**25 ppm**	**50 ppm**
Sodium metasilicate*	OES	**Not specified**	

*Sodium hydroxide has an exposure limit of 2 mg/m^3(15 min STEL). When using sodium metasilicate it is recommended that exposure to alkalinity, calculated as NaOH, should be kept below this limit.

Engineering measures:	Provide adequate ventilation or other engineering controls to keep the airborne concentration of vapours below their respective threshold limit value.
Hygiene measures:	***Wash hands*** after handling and before eating, smoking, using lavatory, and at the end of the day. ***Launde***r contaminated clothes before reuse.

Protective measures:

Respiratory protection:	Respiratory protection required if there is a risk of uncontrolled exposure to vapour.
Hand:	Wear chemical resistant gloves, i.e., butyl rubber gloves.
Eye:	Wear full-face shield or goggles if contact with eyes is a risk.
Skin:	Overalls should be worn during prolonged handling operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear red liquid
Odour:	Rancid
pH (100%) @ 20 °C:	11.5 typical
Boiling point (°C):	> 100
Flash point (°C):	N/A
Flammability limit (Upper %):	N/A
Flammability limit (Lower%):	N/A
Explosive properties:	N/A
Specific gravity @ 20 °C	1.030 – 1.040
Solubility in water:	Complete
Solubility in organic:	Slight
Freeze point (°C):	0

10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and stored conditions.
Conditions to avoid:	Keep from freezing. Away from direct sources of heat.
Materials to avoid:	Avoid contact with strong acids, oxidising agents, halogentated hydrocarbon and metals, including Al, Zn, etc.
Hazardous decomposition products:	May release flammable hydrogen in contact with aluminium and zinc. The organic constituents, mainly synthetic detergents, may produce a variety of harmful fumes and acrid gases including oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

Effects:	Repeated or prolonged contact may be irritating to eyes and skin. High concentration of vapour may irritate the upper respiratory tract.
Acute toxicity (oral, dermal inhalation):	LD_{50}, oral-rat: 20 ml/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:	High concentrations injure aquatic life by effect on pH. The product is expected to be harmful to aquatic species. Soluble silicates, upon dilution, rapidly depolymerises to molecular species that are indistinguishable from natural dissolved silica. LC_{50}, 96h. fathead minnow - >20g/litre EC_{50}, 48h, daphnia magna> 12g/litre
Mobility:	Soluble in water.
Persistence and degradability:	Theoretical oxygen demand (ThOD): 0.2g/g; BOD_{20}: 88%ThOD

13. DISPOSAL CONSIDERATIONS

Transfer waste and spillage mixture to suitable containers. Close the containers and vent if necessary.

Substance:	Dispose of via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Container:	As substance. Used containers must not be cut up or punctured until completely purged of product residues.

14. TRANSPORT INFORMATION

Transport Information	Not applicable
Transport warning label	Not applicable
ADR	Not applicable
RID	Not applicable
IMO – IMDG	Not applicable
IATA	Not applicable
UN No	Not applicable

15. REGULATORY INFORMATION

Ingredients listed in Approved Supply List:	2-Butoxyethanol and 2-aminoethanol	
Label name:	HARMFUL	
Symbols:	X_n	
Risk phrases:	R21/22	Harmful in contact with skin and if swallowed
	R36/38	Irritating to eyes and skin
Safety phrases:	S36/37/39	Wear protective clothing, gloves and eye/face protection
	S46	If swallowed, seek medical advice immediately and show this container or label

E. C. No.: (if applicable)

16. OTHER INFORMATION

Further information:

This MSDS was prepared in accordance with the following:

Council Directive 92/32/EEC of 30 April 1992 amending for the seventh time Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances and all subsequent adaptations to technical progress.

Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

Commission Directive 2001/58/EC of 27 July 2001 amending for the second time Directive 91/155/EEC defining and laying down the detailed arrangements for the system of specific information relating to dangerous preparations in implementation of Article 14 of European Parliament and Council Directive 1999/45/EC and relating to dangerous substances in implementation of Article 27 of Council Directive 67/548/EEC (safety data sheets).

ISO 110140-1 : Material Safety Data Sheet for Chemical Product.

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