Issued: 02/07/2010 Revision No: XX

Safety Data Sheet
According to the Commission Regulation (EU) No 453/2010 Annex II of REACH Regulation

SECTION 1: Identification of the mixture and of the company

1.1 Product identifier

Pro-Foam +

1.2 Relevant identified uses of the mixture and of the company

Alkaline based condensing coil cleaner.

1.3 Details of the supplier of the safety data sheet

Diversitech UK Limited
Glaisdale Drive East
Nottingham
NG8 4LY
United Kingdom
Tel: +44 1159005858
Fax: +44 1159294468
Contact: Anthony Jernigan
Email: tjernigan@diversitech.com

1.4 Emergency telephone number

Emergency tel: +1813 248 0585 24 Hours, 7 Emergency Days, Chem-Tel, Inc.

SECTION 2: Hazards identification

2.1 Classification of the mixture

Classification under CHIP:	[C]; R35
Directive 1999/45/EC:	This mixture meets the criteria for classification as dangerous in accordance with Directive 1999/45/EC.

Physicochemical hazards: Can react with certain metals, such as aluminium, to generate flammable hydrogen gas.

Human health: Causes irritation or severe burns to skin and eyes. If inhaled, symptoms may include sneezing, sore throat or runny nose. Swallowing may cause severe burns of mouth, throat and stomach. There may be diarrhoea, vomiting, bleeding from the mouth or nose.

Environment: This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment.

Please see Section 16 for full classification.

2.2 Label elements

Corrosive

Risk phrases

R35: Causes severe burns.

Safety Phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of soap and water.
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60: This material and its container must be disposed of as hazardous waste.

2.3 Other hazards

Workplace exposure limit:	This product does not have a workplace exposure limit.
PBT:	This product does not contain substances identified as PBT.

SECTION 3: Composition/information on ingredients

Name:	CAS Number	EINECS Number	% Composition	Classification according to CHIP
Sodium hydroxide	1310-73-2	215-185-5	15-20	[C], R35

SECTION 4: First-aid measures

4.1 Description of first aid measures

Skin contact - Immediately flush skin with plenty of water for at least 15 minutes. Remove all contaminated clothes and footwear immediately unless stuck to skin. Consult a doctor.
Eye contact - Immediately flush eyes with plenty of water for 15 minutes, lifting lower and upper eyelids occasionally. Transfer to hospital for specialist examination.
Ingestion - Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.
Inhalation - Remove casualty from exposure ensuring one's own safety whilst doing so. If breathing becomes laboured, give oxygen. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes irritation or severe burns to skin and eyes. If inhaled, symptoms may include sneezing, sore throat or runny nose. Swallowing may cause severe burns of mouth, throat and stomach. There may be diarrhoea, vomiting, bleeding from the mouth or nose.

4.3 Indication of any immediate attention and special treatment needed

Get medical attention immediately. Perform endoscopy in all cases of suspected sodium hydroxide ingestion. In cases of severe oesophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Do not use water. Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture

Can react with certain metals, such as aluminium, to generate flammable hydrogen gas.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation Keep unnecessary and unprotected people away from area of spill. Remove contaminated clothing immediately.

6.2 Environmental precautions

Do not discharge into drains or rivers.

6.3 Method for cleaning up

Contain and recover liquid when possible. Residues from spills can be diluted with water, neutralised with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralised caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal. Do not use aluminium tools to collect absorbed material or aluminium containers to store collected wastes.

6.4 Reference to other sections

Please refer to Section 8 for details on protective wear.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure there is sufficient ventilation of the area. Always add the caustic to water while stirring; never the reverse. Wash hands after handling. Empty containers may be hazardous as they retain product residues.

7.2 Condition for safe storage, including any incompatibilities

Store in cool, well ventilated area. Protect from physical damage. Keep away from incompatibles. Store above 16 degrees centigrade to prevent freezing. Keep away from moisture. Do not use aluminium containers. Do not store with magnesium containers.

7.3 Specific end use(s)

No further details

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

SODIUM HYDROXIDE
UK - 8 hour TWA: 2 mg/m3
UK - 15 min. STEL: 2 mg/m3

8.2 Exposure controls

Ensure there is sufficient ventilation of the area.

Eye/face protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area.
Skin protection:

Hand protection: Impermeable and acid-resistant gloves.
Other: Wear impervious and acid-resistant protective clothing, including boots, gloves, lab coat, apron or coveralls

Respiratory protection: A system of local and/or general exhaust is recommended to keep employee below exposure limit. A half-piece particulate respirator (EN 149) may be worn for up to ten time the exposure limit. Local exhaust ventilation is preferred. A full-face piece particulate respirator may be worn up to 50 times the exposure limit.
Thermal hazards: Not relevant

SECTION **9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Appearance:	Yellow liquid
Odour:	Odourless
Odour threshold:	n.a.
pH:	14
Melting point/freezing point:	-3.88 °C
Initial boiling point and boiling range:	104.4 °C
Flash point:	n.a.
Evaporation rate:	(Water = 1) > 1
Flammability limits %	n.a.
Vapour pressure:	same as water
Vapour density	same as water
Relative density:	1.19
Solubility:	Miscible in water
Partition Coefficient: n-octanol/water:	n.a.
Auto-ignition temperature:	n.a.
Decomposition temperature:	n.a.
Viscosity:	n.a.
Explosive properties:	n.a.
Oxidising properties:	n.a.

9.2 Other information

No further details

SECTION **10: Stability and reactivity**

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Sodium hydroxide in contact with acids and organic halogen compounds, especially trichloroethylene, may cause violent reactions. Contact with nitro methane and other similar nitro compounds cause the formation of shock-sensitive salts. Contact with metals such as aluminium, magnesium, tin and zinc cause formation of flammable hydrogen gas. Sodium hydroxide, even in fairly dilute solution, reacts readily with various sugars to produce carbon monoxide. Precautions should be taken including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.

10.4 Conditions to avoid

Freezing temperatures. Incompatibles

10.5 Incompatible materials

Acids. Halogens. Nitrates. Magnesium. Aluminium. Zinc. Metal containers.

10.6 Hazardous decomposition products

In combustion emits toxic fumes of carbon dioxide / carbon monoxide. When exposed to nitro compounds cause the formation of shock-sensitive salts.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test	Species	End-Point	Value
Dermal	Rabbit	LD50	500 mg/kg/24H
Eye	Rabbit	LD50	50 µg/24H

Acute Toxicity: Causes severe burns. Severe irritant if inhaled. Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Sever pneumonitis may occur. Swallowing may cause severe burns of mouth, throat and stomach. Severe scarring of tissue and death may result. There may be diarrhoea. There may be vomiting. There may be bleeding from the mouth or nose. A fall in blood pressure may occur. Damage may appear days after exposure.
Irritation: Skin exposure can cause irritation or severe burns and scarring with greater exposures. Eye contact causes irritation. May cause permanent damage. May cause permanent blindness.
Corrosivity: In contact with skin, causes severe burns.
Sensitisation: Not a skin sensitiser
Repeated dose toxicity: No effect
Carcinogenicity: Not expected to be carcinogenic.
Mutagenicity: Not expected to be mutagenic
Toxicity for reproduction: No effect

Route of exposure: Skin contact and inhalation.

Symptoms related to the physical, chemical and toxicological characteristics: Causes irritation or severe burns to skin and eyes. If inhaled, symptoms may include sneezing, sore throat or runny nose. Swallowing may cause severe burns of mouth, throat and stomach. There may be diarrhoea, vomiting, bleeding from the mouth or nose.

SECTION 12: Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This product does not contain substances identified as PBT.

12.6 Other adverse effects

No further details

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations - Treat empty containers as hazardous.
Disposal of packaging - Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility.

Please follow all local, regional, national and international laws.

SECTION **14: Transport information**

14.1 UN number

UN 3266

14.2 UN proper shipping name

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (contains sodium hydroxide)

14.3 Transport hazard class(es)

Class 8

14.4 Packing group

II

14.5 Environmental hazards

Not Environmentally Hazardous Substance

14.6 Special precautions for user

See section 8

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable to packaged goods

Mode-specific information:

ROAD/RAIL (ADR/RID/CDG)	Transport category 1 Tunnel restriction code E
SEA (IMDG)	Not Marine Pollutant IMDG Code segregation group18 – Alkalis EmS: F-A S-B
AIR (ICAO/IATA)	ERG Code 8L

SECTION **15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

According to CHIP

Hazard symbols: Corrosive

Risk phrases

R35: Causes severe burns.

Safety Phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60: This material and its container must be disposed of as hazardous waste.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

15.2 Chemical safety assessment

A chemical safety assessment has not been conducted.

SECTION **16: Other information**

Other information

This safety data sheet is prepared in accordance with Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Risk phrases used in Section 3

R35: Causes severe burns.

Legal disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.