

# PRO-COOL™ SAFETY DATA SHEET

Issue 1, Version 0, Approved 08 October 2010

7 pages

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-Cool

### 1.2 Relevant identified uses of the mixture and of the company

Liquid ice machine cleaner

DiversiTech UK Limited

Glaisdale Drive East

Nottingham

NG8 4LY

Phone: + 44 115 900 5858

### 1.4 Emergency telephone number

Emergency Telephone Number: +1 813 248 0585 24 Hours, 7 Days, Chem Tel, Inc.

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the mixture

**Classification under CHIP:** [C]; R34; [Xi]; R36, R38

**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. May cause fire and explosions when in contact with oxidising agents or strong bases. Adding water to caustic solution generates large amounts of heat.

**Human health:** Causes burns. Prolonged or repeated contact may cause defatting and drying of skin. If ingested, nausea and stomach pain may occur. There may be vomiting and diarrhoea. May cause gastric distress. If inhaled, there may be irritation of the throat with a feeling of tightness in the chest. May experience difficulty breathing

**Environment:** Long term degradation products may arise. The products of degradation are less toxic than the product itself.

Please see Section 16 for full classification.

### 2.2 Label elements



Irritant

Risk phrases

R36/38: Irritating to eyes and skin.

Safety Phrases

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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
Orthophosphoric acid	7664-38-2	231-633-2	<75	[C], R34
Sulphamic acid	5329-14-6	226-218-8	<10	[Xi], R36/38, R52/53

## SECTION 4: FIRST-AID MEASURES

### 4.1 Description of first aid measures

**Skin contact** - Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. If irritation develops or persists, get medical attention

**Eye contact** - Bathe the eye with running water for 15 minutes. Lift eyelids while flushing to ensure all areas of the eye and eyelid are flushed. Transfer to hospital for specialist examination.

**Ingestion** - Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Call the nearest poison centre for medical advice.

**Inhalation** - Allow the affected individual to rest in well ventilated area. Seek medical attention if breathing distress continues.

#### **4.2 Most important symptoms and effects, both acute and delayed**

Causes burns. Prolonged or repeated contact may cause defatting and drying of skin. If ingested, nausea and stomach pain may occur. There may be vomiting and diarrhoea. May cause gastric distress. If inhaled, there may be irritation of the throat with a feeling of tightness in the chest. May experience difficulty breathing

#### **4.3 Indication of any immediate attention and special treatment needed**

If the product makes contact with the eye and skin immediate treatment is required. If the product is ingested immediate medical attention is required.

### **SECTION 5: FIRE-FIGHTING MEASURES**

#### **5.1 Extinguishing media**

Do not use water.

#### **5.2 Special hazards arising from the substance or mixture**

Can react with certain metals, such as aluminium, to generate flammable hydrogen gas. May cause fire and explosions when in contact with incompatible materials. Adding water to caustic solution generates large amounts of heat.

#### **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**

Remove contaminated clothing immediately. Cleanup personnel must be equipped with personal protective gear. Ensure adequate ventilation. Keep unnecessary and unprotected people away from area of spill.

#### **6.2 Environmental precautions**

Dispose of neutralised waste material in a hazardous waste facility.

#### **6.3 Method for cleaning up**

Neutralise with sodium bicarbonate, soda ash, or lime. Pick up neutralised solution with a plastic pump or vacuum truck and store the neutralised solution in a leak-proof polyethylene container until the product can be disposed of in a hazardous waste facility. Flush area twice with water to remove any remaining residues. Store wash solution in polyethylene containers 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**

Avoid direct contact with the substance. Wash hands after handling. Smoking is forbidden. Wash clothing after handling. Ensure there is sufficient ventilation of the area.

#### **7.2 Condition for safe storage, including any incompatibilities**

Keep container tightly closed. Do not use aluminium containers. Do not store with magnesium containers. Do not use aluminium tools to collect absorbed material or aluminium containers to store collected wastes. Do not use metal measuring containers for handling this product.

#### **7.3 Specific end use(s)**

No further details

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

ORTHOPHOSPHORIC ACID...100%

UK - 8 hour TWA: 1 mg/m<sup>3</sup>

UK - 15 min. STEL: 2 mg/m<sup>3</sup>

### 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 gloves (nitrile gloves)

Other: Wear impervious and acid-resistant protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate to prevent skin contact.

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 times 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:	Amber liquid
Odour:	Astringent
Odour threshold:	n.a.
pH:	n.a.
Melting point/freezing point:	0 °C.
Initial boiling point and boiling range:	>100 °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:	1.095
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

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

### 10.4 Conditions to avoid

Heat. Incompatibles

### 10.5 Incompatible materials

Oxidising agents. Strong bases. Metal containers. Magnesium. Aluminium.

### 10.6 Hazardous decomposition products

Hydrogen gas. Sulphur Dioxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Test	Species	End-Point	Value
Dust/Mist	Rat	1 hour LC50	209 ppmV
Dermal	Rabbit	LD50	2740 mg/kg
Oral	Rat	LD50	1530 mg/kg

Acute Toxicity: Corrosive, causes burns

Irritation: Prolonged or repeated contact may cause defatting and drying of skin. Severe irritation of skin and eyes. If ingested, nausea and stomach pain may occur. There may be vomiting and diarrhoea. May cause gastric distress. May be fatal if swallowed. If inhaled, there may be irritation of the throat with a feeling of tightness in the chest. May experience difficulty breathing.

Corrosivity: According to the Corrositex test the breakthrough time for Pro-Cool is > 360 minutes.

Sensitisation: No data

Repeated dose toxicity: No data

Carcinogenicity: No data

Mutagenicity: No data

Toxicity for reproduction: No data

The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Route of exposure: Skin contact

Symptoms related to the physical, chemical and toxicological characteristics: Prolonged or repeated contact may cause defatting and drying of skin. If ingested, nausea and stomach pain may occur. There may be vomiting and diarrhoea. May cause gastric distress. If inhaled, there may be irritation of the throat with a feeling of tightness in the chest. May experience difficulty breathing.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available.

### 12.2 Persistence and degradability

Long term degradation products may arise. The products of degradation are less toxic than the product itself.

### 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. Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging - Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Dispose of according to national regulations.

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

### **SECTION 14: TRANSPORT INFORMATION**

#### **14.1 UN number**

UN 3264

#### **14.2 UN proper shipping name**

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Phosphoric and Sulphamic Acids)

#### **14.3 Transport hazard class**

Class 8

#### **14.4 Packing group**

II

#### **14.5 Environmental hazards**

Not Environmentally Hazardous Substance or Marine Pollutant

#### **14.6 Special precautions for user**

Not applicable

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

Not applicable to packaged goods

Mode Specific information

### **SECTION 15: REGULATORY INFORMATION**

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

According to CHIP

Hazard symbols:



Irritant

Risk phrases

R36/38: Irritating to eyes and skin.

Safety Phrases

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

R34: Causes burns.

R36/38: Irritating to eyes and skin.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## **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.