Material Safety Data Sheet

SAFETY DATA SHEET WILLOWCHEM 70

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

| PRODUCT NAME | WILLOWCHEM 70 |
|---------------------|--|
| SUPPLIER | WILLOWCHEM TECHNOLOGY LIMITED UNIT 6 & 7 HIRWAUN INDUSTRIAL ESTATE |
| | HIRWAUN MID GLAMORGAN |
| | SOUTH WALES |
| | CF44 9YE |
| | Telephone Number: 01685 812211 |
| EMERGENCY TELEPHONE | 24 hour Emergency Contact Number: 01685 812211 |
| | e-mail address of Competent Person: colinowen@willowchem.co.uk |

2 HAZARDS IDENTIFICATION

Causes severe burns.

CLASSIFICATION

C;R35.

3 COMPOSITION/INFORMATION ON INGREDIENTS

| Name | EC No. | CAS-No. | Content | Classification |
|--------------|-----------|-----------|---------|----------------|
| NITRIC ACID% | 231-714-2 | 7697-37-2 | 30-40% | O;R8 C;R35 |

The Full Text for all R-Phrases are Displayed in Section 16

| EC (EINECS) NO. | 231-714-2 |
|-----------------|-----------|
| CAS-NO. | 7697-37-2 |

4 FIRST-AID MEASURES GENERAL INFORMATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INHALATION

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Keep the affected person warm and at rest. Get prompt medical attention.

When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. INGESTION

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of

exposure. Rinse mouth thoroughly. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention immediately! Provide rest, warmth and fresh air.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention immediately.

EYE CONTACT

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable. Use fire -extinguishing media appropriate for surrounding materials.

SPECIFIC HAZARDS

Fire or high temperatures create: Corrosive gases/vapours/fumes of Nitric acid (HNO3). Nitrous gases (NOx).

PROTECTIVE MEASURES IN FIRE

Wear self-contained breathing apparatus and protective clothing (including fire-fighting helmet, coat, trousers, boots and gloves).

WILLOWCHEM 70

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

In case of a major spillage, full protective equipment including a respirator or self-contained breathing apparatus must be worn.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter sewers or water courses. If spillage does enter sewers or water courses, immediately inform appropriate authorities.

SPILL CLEAN UP METHODS

DO NOT TOUCH SPILLED MATERIAL! Wear necessary protective equipment. Neutralise small amounts with sodium bicarbonate or lime and flush to sewer with large amounts of water. Large spills, dilute, then neutralise with caustic solution. Absorb in vermiculite, dry sand or earth and place into containers. Flush area with plenty of water.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Eye wash facilities and emergency shower must be available when handling this product.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

STORAGE CLASS

Corrosive storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | Std | LT - ppm | LT - mg/m3 | ST - ppm | ST - mg/m3 |
|--------------|-----|----------|------------|----------|------------|
| NITRIC ACID% | WEL | ppm | mg/m3 | 1 ppm | 2.6 mg/m3 |

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit.

HAND PROTECTION

Use protective gloves made of: Butyl rubber. Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). or Polyethylene/Ethylene Vinyl Alcohol (PE/EVAL).

EYE PROTECTION

Use approved safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

| 9 PHYSICAL AND CHEMICAL PROPERTIES | | |
|------------------------------------|-----------------------------|--|
| APPEARANCE | Liquid | |
| COLOUR | Colourless | |
| ODOUR | Pungent | |
| SOLUBILITY | Completely soluble in water | |
| RELATIVE DENSITY | 1.23 16°C | |

10 STABILITY AND REACTIVITY

WILLOWCHEM 70

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Reacts with alkalis and generates heat. Oxidising, avoid contact with reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Corrosive gases/vapours/fumes of: Nitric acid (HNO3). Nitrous gases (NOx).

11 TOXICOLOGICAL INFORMATION

INHALATION

Prolonged inhalation of high concentrations may damage respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

INGESTION

Causes severe burns. Swallowing concentrated chemical may cause severe internal injury. May cause burns in mucous membranes, throat, oesophagus and

stomach.

SKIN CONTACT

Causes severe burns. Contact with concentrated chemical may cause severe skin damage.

EYE CONTACT

Causes severe burns. Risk of serious damage to eyes. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

HEALTH WARNINGS

Contact with concentrated chemical may cause severe skin damage.

MEDICAL SYMPTOMS

Extreme irritation of eyes and mucous membranes, including burning and tearing. Severe skin irritation. Brown skin stains.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses. Nitric acid can cause damage to vegetation. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction at low concentrations.

Highly mobile due to high water solubility. Therefore rapidly diluted in water courses and leached from soils. although low pH in soils may require rectifying by lime additions.

BIOACCUMULATION Product is not expected to bioaccumulate.

DEGRADABILITY

Non-persistent and degraded by bacterial action.

ACUTE FISH TOXICITY

Nitric acid is harmful to aquatic life even at low concentrations due to its acid nature. Neutralisation is required prior to discharge.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Neutralise with soda ash/slaked lime and discharge to sewer with lots of water. Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



| UK ROAD CLASS | 8 | | |
|----------------------|-----------------------------------|---------------------------------------|--------------------------------|
| PROPER SHIPPING NAME | NITRIC ACID, other than red fumin | ng with not more than 70% nitric acid | |
| UN NO. ROAD | 2031 | UK ROAD PACK GR. | II |
| ADR CLASS NO. | 8 | ADR CLASS | Class 8: Corrosive substances. |
| ADR PACK GROUP | П | HAZARD No. (ADR) | 80 |
| | | | |

MARINE POLLUTANT

No.

15 REGULATORY INFORMATION

LABELLING

ADR LABEL NO.



Corrosive

8

RISK PHRASES

SAFETY PHRASES

| R35 | Causes severe burns. |
|-----------|--|
| S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| S45 | In case of accident or if you feel unwell, seek medical advice immediately (show label where possible) |
| S24/25 | Avoid contact with skin and eyes. |
| S36/37/39 | Wear suitable protective clothing, gloves and eye/face protection. |
| S60 | This material and its container must be disposed of as hazardous waste. |

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16 OTHER INFORMATION

 INFORMATION SOURCES

 Dangerous Properties of Industrial Materials Report, N.Sax et.al.

 REVISION DATE
 11/04/08

 REV. NO./REPL. SDS GENERATED
 2

 SDS NO.
 2008/10837

 RISK PHRASES IN FULL
 Causes severe burns.

 R8
 Contact with combustible material may cause fire.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such

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