SAFETY DATA SHEET
WILLOWCHEM 61

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME	WILLOWCHEM 61
APPLICATION	Cleaner
SUPPLIER	WILLOWCHEM TECHNOLOGY LIMITED BALLYROE BALLYHEA CHARLEVILLE CO. CORK 063 - 30874

2 HAZARDS IDENTIFICATION

Irritating to skin. Risk of serious damage to eyes.

CLASSIFICATION Xi;R38, R41.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
BUTYL GLYCOL	203-905-0	111-76-2	<1%	Xn;R20/21/22. Xi;R37.
CHROMIC ACID	231-801-5	773-89-45	<1%	-
FATTY ALCOHOL ETHOXYLATE			1-5%	Xn;R22. Xi;R38,R41.
PHOSPHORIC ACID ...%	231-633-2	7664-38-2	10-20%	C;R34
THICKENING AGENT			1-5%	Xi;R38.

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

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. After the liquid has been swallowed, try to induce vomiting by having affected person touch back of his throat with his finger. Get medical attention.

SKIN CONTACT

Remove affected person from source of contamination. Promptly flush contaminated skin with water. Promptly remove clothing if soaked through and flush the skin with water.

EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

Keep run-off water out of sewers and water sources. Dike for water control. Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities.

UNUSUAL FIRE & EXPLOSION HAZARDS

May develop highly toxic or corrosive fumes if heated. May form toxic or explosive vapours in presence of certain metals. May ignite other combustible materials.

SPECIFIC HAZARDS

Fire or high temperatures create: Corrosive gases/vapours/fumes of Phosphorus oxides POx

PROTECTIVE MEASURES IN FIRE

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

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

Stop leak if possible without risk. DO NOT touch spilled material! Absorb in vermiculite, dry sand or earth and place into containers. Flush area with 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. Wear full protective clothing for prolonged exposure and/or high concentrations.

STORAGE PRECAUTIONS

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

STORAGE CLASS

Corrosive storage. Chemical storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
BUTYL GLYCOL	WEL	25		ppm(Sk)	
CHROMIC ACID	WEL	0.05 No std.		mg/m3	
PHOSPHORIC ACID ...%	WEL		1 mg/m3		2 mg/m3

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

HAND PROTECTION

Use protective gloves made of: Rubber (natural, latex). Neoprene. Nitrile. Polyethylene. Polyvinyl chloride (PVC).

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact. Contact lenses should not be worn when working with this chemical!

OTHER PROTECTION

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash, quick drench. Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Change work clothing daily if contamination is reasonably probable. Promptly remove any clothing that becomes wet or contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Green		
ODOUR	Odourless		
SOLUBILITY	Soluble in water Soluble in Alcohol		
RELATIVE DENSITY	1.15 20	pH-VALUE, DILUTED SOLUTION	1-2

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Gives off hydrogen by reaction with metals.

MATERIALS TO AVOID

Bases, alkalies (inorganic). Massive, solid metal. Powdered metal. Strong oxidising substances. Strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Toxic gases/vapours/fumes of: Oxides of: Phosphorus. Phosphoric acid mist.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50	1530 mg/kg (oral rat)
TOXIC DOSE 2 - LD 50	2740 mg/kg (oral-rbt)

HEALTH WARNINGS

Gas or vapour is harmful on prolonged exposure or in high concentration. This chemical may cause skin/eye irritation and burns (corrosive). Irritant of eyes and mucous membranes

Repeated exposure may cause chronic eye irritation. May cause chemical eye burns. Acute eczematous dermatitis, contact type erythema, oedema, papules, vesicles, bullae, crusts, desquamation. Swallowing concentrated chemical may cause severe internal injury

ROUTE OF ENTRY

Inhalation. Ingestion. Skin and/or eye contact.

TARGET ORGANS

Eyes. Gastro-intestinal tract. Respiratory system, lungs. Skin.

MEDICAL SYMPTOMS

Extreme irritation of eyes and mucous membranes, including burning and tearing. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. Severe skin irritation. Nausea, vomiting

MEDICAL CONSIDERATIONS

Skin disorders and allergies.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous to aquatic life in high concentrations. Low concentrations may act as a nutrient or precipitate heavy metals.

LC 50, 96 Hrs, FISH mg/l	100-1000

MOBILITY

The product is soluble in water.

DEGRADABILITY

Degradable; will enter natural phosphorus cycle. Chromium VI in water will eventually be reduced to chromium III by organic matter in the water. Most chromium released will ultimately be deposited in the sediment.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Absorb in vermiculite or dry sand, dispose in licensed hazardous waste. Confirm disposal procedures with environmental engineer and local regulations. Do not allow runoff to sewer, waterway or ground. Contact specialist disposal companies

14 TRANSPORT INFORMATION

ADR CLASS	Not classified for transportation.

15 REGULATORY INFORMATION

LABELLING

Irritant

RISK PHRASES

R38	Irritating to skin.
R41	Risk of serious damage to eyes.

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.
S37/39	Wear suitable gloves and eye/face protection.

16 OTHER INFORMATION

REVISION DATE	09/08/07
REV. NO./REPL. SDS GENERATED	0
SDS NO.	2007/10858

RISK PHRASES IN FULL

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R22	Harmful if swallowed.
R25	Toxic if swallowed.
R34	Causes burns.
R35	Causes severe burns.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R49	May cause cancer by inhalation.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R8	Contact with combustible material may cause fire.