



SAFETY DATA SHEET

WILLOWCHEM 95

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Compilation date: 20/09/2007

Revision date: 12/10/2017

Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: WILLOWCHEM 95

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: * PC14: Metal surface treatment products, including galvanic and electroplating products. Metal treatment / processing. Anodic etching solution

1.3. Details of the supplier of the safety data sheet

Company name: MPE Limited
Unit 6/7 Hirwaun Industrial Estate
Hirwaun, Aberdare
Rhondda Cynon Taff
CF44 9UP
United Kingdom
Tel: 01685 812765

Email: sales@mpelimited.co.uk

1.4. Emergency telephone number

Emergency tel: 01685 812765

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: STOT RE 2: H373; Carc. 1A: H350i; Repr. 1B: H360D; Skin Corr. 1A: H314; Skin Sens. 1: H317

Most important adverse effects: Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer by inhalation. May damage the unborn child. May cause damage to organs respiratory system, lungs through prolonged or repeated exposure if inhaled.

2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H350i: May cause cancer by inhalation.

H360D: May damage the unborn child.

H373: May cause damage to organs respiratory system, lungs through prolonged or repeated exposure if inhaled.

[cont...]

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Hazard pictograms: GHS05: Corrosion

GHS07: Exclamation mark

GHS08: Health hazard



Signal words: Danger

Precautionary statements: P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+313: IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

SULPHURIC ACID

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-639-5	7664-93-9	-	Skin Corr. 1A: H314	30-50%

CITRIC ACID - REACH registered number(s): 01-2119457026-42-XXXX

201-069-1	See Section 16	-	Eye Irrit. 2: H319	10-30%
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ORTHOPHOSPHORIC ACID

231-633-2	7664-38-2	-	Skin Corr. 1B: H314	1-10%
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NICKEL SULPHATE

232-104-9	7786-81-4	-	Muta. 2: H341; Repr. 1B: H360D; STOT RE 1: H372; Carc. 1A: H350; Carc. 1Ai: H350i	<1%
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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.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: * Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

[cont...]

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Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: * Severe burns may occur. Blistering may occur. Progressive ulceration will occur if treatment is not immediate. May cause an allergic skin reaction May cause sensitisation by skin contact. Sensitisation of the skin is possible in susceptible persons.

Eye contact: * Corneal burns may occur. There may be severe pain. May cause permanent damage.

Ingestion: * Corrosive burns may appear around the lips. May cause throat burns. Blood may be vomited. Nausea and stomach pain may occur. There may be vomiting and diarrhoea. There may be bleeding from the mouth or nose. May cause harm to the unborn child.

Inhalation: * Inhalation may be fatal. May cause cancer by inhalation. May cause allergic reaction. May cause sensitisation. Prolonged inhalation of mists may cause lung inflammation. Possible long term effects on the lungs. May damage the unborn child.

Delayed / immediate effects: * Immediate effects can be expected after short-term exposure. Delayed effects can be expected after short-term exposure. Delayed effects can be expected after long-term exposure. May cause cancer. May cause immediate & severe reaction for sensitised persons. May cause asthma like reactions. Prolonged or repeated exposure may result in damage to lungs & respiratory system.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: * Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. A decontamination shower should be available on the premises. Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: * Corrosive. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of sulphur oxides. May evolve oxides of Phosphorous in a fire.

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5.3. Advice for fire-fighters

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

Personal precautions: Wear suitable protective clothing. Refer to section 8 of SDS for personal protection details. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Remove all incompatible materials as outlined in section 10 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: * Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. For small spillages: Neutralise spillage with alkaline material (i.e. soda ash, sodium bicarbonate). Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

Reference to other sections: * Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: * Wear suitable protective clothing. Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. Ensure that contaminated clothing is thoroughly laundered prior to re-use.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Avoid incompatible materials and conditions - see section 10 of SDS. Do not store near foodstuffs.

Suitable packaging: * Must only be kept in original packaging. Plastic. Plastic-lined.

7.3. Specific end use(s)

Specific end use(s): * No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

[cont...]

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Hazardous ingredients:

SULPHURIC ACID...100%

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	0.05 mg/m ³	-	-	-

CITRIC ACID

UK	-	-	4 mg/m ³	-
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ORTHOPHOSPHORIC ACID...100%

UK	1 mg/m ³	2 mg/m ³	-	-
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DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: * Ensure there is sufficient ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place. It is recommended to carry out handling & processing operations utilising an appropriate LEV system.

Respiratory protection: * Wear suitable respiratory protection. Particle filter class P3SL (EN143). Gas/vapour filter, type B: inorganic vapours excl. CO (EN141). Gas/vapour filter, type E: sulphur dioxide and other acid gases (EN141).

Hand protection: * Gloves (acid resistant).

Eye protection: * Safety glasses. Face-shield. Ensure eye bath is to hand.

Skin protection: * Wear full chemical suit. Acid-resistant protective clothing. Wear wellingtons. Ensure safety shower is to hand.

Environmental: * Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Green

Odour: Barely perceptible odour

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible in all proportions

Viscosity: Non-viscous

Boiling point/range°C: >35

Flash point°C: >93

pH: ~ 1

Melting point/range°C: ~ 0

Relative density: 1.42 g/ml @ 20 °C

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9.2. Other information

Other information: Product is not flammable. No further information available at this time.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: * Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: * Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: * Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: Heat. Hot surfaces.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Strong bases. Alkalis.

10.6. Hazardous decomposition products

Haz. decomp. products: * In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of sulphur oxides. May release toxic fumes of Phosphorous Oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

SULPHURIC ACID...100%

ORL	RAT	LD50	2140	mg/kg
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CITRIC ACID

ORAL	MUS	LD50	5040	mg/kg
ORAL	RBT	LD50	11700	mg/kg

ORTHOPHOSPHORIC ACID...100%

ORL	RAT	LD50	1530	mg/kg
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NICKEL SULPHATE

IPR	MUS	LD50	20894	µg/kg
IPR	RAT	LD50	500	mg/kg

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IVN	MUS	LDLO	7640	µg/kg
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Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated
Carcinogenicity	--	Hazardous: calculated
Reproductive toxicity	--	Hazardous: calculated
STOT-repeated exposure	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: * Severe burns may occur. Blistering may occur. Progressive ulceration will occur if treatment is not immediate. May cause an allergic skin reaction May cause sensitisation by skin contact. Sensitisation of the skin is possible in susceptible persons.

Eye contact: * Corneal burns may occur. There may be severe pain. May cause permanent damage.

Ingestion: * Corrosive burns may appear around the lips. May cause throat burns. Blood may be vomited. Nausea and stomach pain may occur. There may be vomiting and diarrhoea. There may be bleeding from the mouth or nose. May cause harm to the unborn child.

Inhalation: * Inhalation may be fatal. May cause cancer by inhalation. May cause allergic reaction. May cause sensitisation. Prolonged inhalation of mists may cause lung inflammation. Possible long term effects on the lungs. May damage the unborn child.

Delayed / immediate effects: * Immediate effects can be expected after short-term exposure. Delayed effects can be expected after short-term exposure. Delayed effects can be expected after long-term exposure. May cause cancer. May cause immediate & severe reaction for sensitised persons. May cause asthma like reactions. Prolonged or repeated exposure may result in damage to lungs & respiratory system.

Other information: * The mixture contains a substance considered to have reproductive toxic properties.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

CITRIC ACID

GOLDFISH	96H LC50	440 - 706	mg/l
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12.2. Persistence and degradability

Persistence and degradability: * The product is inorganic so can not be biodegradable, however it is expected to degrade or disassociate.

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12.3. Bioaccumulative potential

Bioaccumulative potential: * There is no data available at present.

12.4. Mobility in soil

Mobility: * Non-volatile. Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: * Large doses causes high/low pH which may affect effluent and sewage treatment processes. Discharge of large quantities may kill fish and other aquatic life due to increase/decrease in pH. Do not allow to enter watercourses or soils. Spillage in sewers or waterways must be avoided.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: * Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: * No information available at this time. No significant opportunity for recovery available with the product.

Disposal of packaging: Contaminated containers must not be treated as household waste. Where practical, containers and packaging should be recycled by a licenced contactor.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3264

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(SULPHURIC ACID; ORTHOPHOSPHORIC ACID)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

[cont...]

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14.6. Special precautions for user

Tunnel code: E

Transport category: 2

Section 15: Regulatory information

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

Specific regulations: * No specific applicable legislation.

15.2. Chemical Safety Assessment

Chemical safety assessment: * A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: * This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

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

WARNING: For professional use only.

Phrases used in s.2 and s.3: H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H350i: May cause cancer by inhalation.

H360D: May damage the unborn child.

H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

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.