



## SAFETY DATA SHEET

WILLOWCHEM 70

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Compilation date: 11/04/2008

Revision date: 07/04/2016

Revision No: 3

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

#### 1.1. Product identifier

**Product name:** WILLOWCHEM 70

**REACH registered name:** NITRIC ACID

**REACH registered number(s):** 01-2119487297-23-XXXX

**CAS number:** 7697-37-2

**EINECS number:** 231-714-2

**Index number:** 007-004-00-1

#### 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. PC20: Products such as ph-regulators, flocculants, precipitants, neutralization agents. PC21: Laboratory chemicals. Metal treatment / processing. Metal passivation.

#### 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 CHIP:** C: R35

**Classification under CLP:** Skin Corr. 1A: H314; -: EUH071

**Most important adverse effects:** Causes severe burns.

#### 2.2. Label elements

**Label elements:**

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

EUH071: Corrosive to the respiratory tract.

[cont...]

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**Signal words:** \* Danger

**Hazard pictograms:** \* GHS05: Corrosion



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

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

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

Rinse skin with water/shower.

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

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501: Dispose of contents/container to : An approved recycle or waste disposal facility.

**Label elements under CHIP:**

**Hazard symbols:** Corrosive.



**Risk phrases:** R35: Causes severe burns.

## 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:**

NITRIC ACID - REACH registered number(s): 01-2119487297-23-XXXX

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-714-2	7697-37-2	O: R8; C: R35	Ox. Liq. 3: H272; Skin Corr. 1A: H314	30-50%

## 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.

**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.

[cont...]

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**Inhalation:** \* Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. Move to fresh air in case of accidental inhalation of vapours. Consult a doctor.

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

**Skin contact:** Causes burns. Blistering may occur. Severe burns may occur.

**Eye contact:** There may be pain and redness. The eyes may water profusely. Corneal burns may occur. May cause permanent damage. Risk of serious damage to eyes.

**Ingestion:** There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Causes burns to the gastrointestinal tract. May cause throat burns. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath. Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Corrosive to the mucous membrane. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum. Prolonged inhalation of mists may cause lung inflammation.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## 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. Eye bathing equipment should be available on the premises. A decontamination shower should be available on the premises. Keep under medical supervision for at least 48 hours.

## 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. Do not use dry chemical powder. Do not use foam.

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

**Exposure hazards:** \* Corrosive. In combustion emits toxic fumes of nitrogen oxides. May produce flammable Hydrogen gas when in contact with metals, with obvious explosion hazards.

### 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

[cont...]

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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.

## 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:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.  
For small spillages: Neutralise spillage with alkaline material (i.e. soda ash, sodium bicarbonate).

## 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. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air. Avoid contact with the material and breathing its vapours.

### 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.

**Suitable packaging:** \* Polyethylene. Plastic. Plastic-lined. 316 stainless steel Glass. Do not use aluminium containers. Some rubbers and plastics are attacked by the product.

### 7.3. Specific end use(s)

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

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Workplace exposure limits:

#### Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2.6 mg/m <sup>3</sup>	-	-

#### Hazardous ingredients:

NITRIC ACID...100%

[cont...]

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## Workplace exposure limits:

## Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2.6 mg/m <sup>3</sup>	-	-

## DNEL/PNEC Values

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Type	Exposure	Value	Population	Effect
DNEL	Inhalation	2.6 mg/m <sup>3</sup>	Workers	Local
DNEL	Inhalation (repeated dose)	1.3 mg/m <sup>3</sup>	Workers	Local

## 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.

**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). Butyl gloves. PVC gloves. PTFE fluoro elastomer. It is recommended that suitable gloves are determined in consultation with protective clothing supplier taking into consideration the expected usage.

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

**Skin protection:** Protective clothing. Wear full chemical suit. Wear wellingtons. Ensure safety shower is to hand.

**Environmental:** No special requirement.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Colourless to yellow

**Odour:** Pungent

**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

**Relative density:** ~ 1.23 g/ml

**pH:** ~ 1

### 9.2. Other information

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

## Section 10: Stability and reactivity

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## 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.  
Decomposition may occur on exposure to conditions or materials listed below.

## 10.4. Conditions to avoid

**Conditions to avoid:** \* Heat. Hot surfaces.

## 10.5. Incompatible materials

**Materials to avoid:** \* Reducing agents. Strong bases. Alkalis. Organic materials. Combustibles. Brass  
Metals. May react with certain metals to liberate flammable Hydrogen gas.

## 10.6. Hazardous decomposition products

**Haz. decomp. products:** \* In combustion emits toxic fumes of nitrogen oxides.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### \* Toxicity values:

Route	Species	Test	Value	Units
VAPOURS	RAT	4H LC50	1.56	mg/kg

#### Relevant effects for mixture:

Effect	Route	Basis
Corrosivity	OPT INH DRM	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** Causes burns. Blistering may occur. Severe burns may occur.

**Eye contact:** There may be pain and redness. The eyes may water profusely. Corneal burns may occur. May cause permanent damage. Risk of serious damage to eyes.

**Ingestion:** There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Causes burns to the gastrointestinal tract. May cause throat burns. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath. Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Corrosive to the mucous membrane. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum. Prolonged inhalation of mists may cause lung inflammation.

[cont...]

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**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** There is no further information at this time.

## Section 12: Ecological information

### 12.1. Toxicity

\* **Ecotoxicity values:**

Species	Test	Value	Units
DAPHNIA	48H EC50	180	mg/l
FISH	96H LC50	> 100	mg/l

### 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.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** \* Product is not expected to bioaccumulate.

### 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:** Not expected to cause significant environmental impact. May cause algae bloom. May act as a plant nutrient. 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.

**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

[cont...]

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## 14.1. UN number

UN number: UN2031

## 14.2. UN proper shipping name

Shipping name: NITRIC 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

## 14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

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

Transport in bulk: No information available.

## Section 15: Regulatory information

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

**Specific regulations:** \* This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC. This product is controlled under Regulation (EU) No 98/2013 on the marketing and use of explosives precursors, and The Control of Explosive Precursor Regulations 2014 (SI 1942).

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** \* A chemical safety assessment has 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 453/2010.

This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

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

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WARNING: For professional use only.

**Phrases used in s.2 and s.3:** EUH071: Corrosive to the respiratory tract.

[cont...]



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H272: May intensify fire; oxidiser.

H314: Causes severe skin burns and eye damage.

R8: Contact with combustible material may cause fire.

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.