



# SAFETY DATA SHEET

## NITRIC ACID (70% w/w)

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

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**PRODUCT NAME:** NITRIC ACID (70% w/w)  
**PART No.:** RM172  
**SUPPLIER:** J M Loveridge plc  
Southbrook Road, Southampton  
Hampshire  
SO15 1BH  
Tel: 023 8022 2008  
Fax: 023 8022 2117

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS:

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**EU INDEX No.:** 007-004-00-1  
**EEC (EINECS) No.** 231-714-2  
**CAS No.:** 7697-37-2

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### 3. HAZARDS IDENTIFICATION:

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Contact with combustible material may cause fire. Causes severe burns.

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### 4. FIRST AID MEASURES:

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**GENERAL:** IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION

**INHALATION:** Move affected person to fresh air. If recovery not rapid, seek medical attention.

**INGESTION:** Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep patient at rest and obtain medical attention.

**SKIN:** Remove contaminated clothing. Wash affected area with plenty of soap and water. Obtain medical attention. Launder clothing before re-use.

**EYES:** Rinse immediately with plenty of water for at least 5 minutes while lifting the eye lids. Seek medical attention. Continue to rinse.

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### 5. FIRE FIGHTING MEASURES:

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<b>EXTINGUISHING MEDIA:</b>	Use extinguishing media suitable against surrounding fire or the cause of fire.
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS:</b>	May ignite combustible materials.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Toxic or corrosive vapours may be released in fire situation. Oxides of nitrogen.
<b>PROTECTIVE MEASURES IN FIRE:</b>	Fire fighters should wear self-contained breathing apparatus. Do not release contaminated water into drains, soil or surface water.

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## 6. ACCIDENTAL RELEASE MEASURES:

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<b>PERSONAL PRECAUTION IN SPILL:</b>	Avoid direct contact with skin, eyes and clothing. Do not breathe vapour or fumes. Wear appropriate protective clothing.
<b>PRECAUTIONS TO PROTECT ENVIRONMENT:</b>	Prevent contamination of soil, drains and surface water.
<b>SPILL CLEANUP METHODS:</b>	Neutralise spillage with alkaline material (sodium bicarbonate or soda-ash). Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. Wash the area clean with water and detergent, observing environmental requirements.

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## 7. HANDLING AND STORAGE:

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<b>USAGE PRECAUTIONS:</b>	<b>HANDLING</b> - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid vapour inhalation, skin and eye contact.
<b>STORAGE PRECAUTIONS:</b>	Store in a cool, dry, well ventilated place, in securely closed original container. Store away from combustible materials.
<b>STORAGE CRITERIA:</b>	Corrosive storage.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

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<b>INGREDIENT NAME:</b>	<b>CAS No.:</b>	<b>STD</b>	<b>LT EXP 8 Hrs</b>	<b>ST EXP 15 Min</b>
NITRIC ACID (70% w/w)	7697-37-2	OES	2 ppm	4 ppm

<b>VENTILATION:</b>	Work in a fume cupboard or use local exhaust ventilation.
<b>RESPIRATORS:</b>	Respiratory protection required in insufficiently ventilated working areas. For short periods of work, a suitable RPE fitted with a combination E1 filter cartridge is recommended.
<b>PROTECTIVE GLOVES:</b>	Use impervious gloves.
<b>EYE PROTECTION:</b>	Approved chemical safety goggles or face protection.
<b>OTHER PROTECTION:</b>	Wear protective clothing and closed footwear. Apron. Wear personal protective equipment appropriate to the quantity of material handled.
<b>HYGIENIC WORK PRACTICES:</b>	<b>SKIN PROTECTION</b> - apply barrier cream to hands and exposed skin. Promptly remove contaminated clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES:

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<b>APPEARANCE:</b>	Colourless to slightly yellow fuming liquid.	
<b>ODOUR/TASTE:</b>	Pungent, suffocating.	
<b>PHYSICAL DATA COMMENTS:</b>	Not flammable, but will increase flammability of other materials.	
<b>BOILING POINT (°C, interval):</b>	89	<b>Pressure:</b>
<b>DENSITY/SPECIFIC GRAVITY (g/ml):</b>	1.4 - 1.5	<b>Temperature (°C):</b>
<b>pH-VALUE, CONC. SOLUTION:</b>	< 1	
<b>SOLUBILITY DESCRIPTION:</b>	Miscible with water in all proportions.	

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## 10. STABILITY AND REACTIVITY:

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<b>STABILITY:</b>	Stable under normal conditions of use.
<b>MATERIALS TO AVOID:</b>	Combustible materials. Oxidisable substances. May react violently with reducing agents, strong bases, organic materials, finely powdered metals and chlorates. Reaction with most common metals liberates toxic nitrogen oxides and hydrogen - CARE, risk of explosion.
<b>HAZARDOUS DECOMP. PRODUCTS:</b>	Thermal decomposition or burning may release toxic and corrosive oxides of nitrogen.

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## 11. TOXICOLOGICAL INFORMATION:

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<b>HEALTH HAZARDS, GENERAL:</b>	Strongly corrosive substance.
<b>INHALATION:</b>	Fumes are corrosive to the respiratory system. Pulmonary oedema may occur upto 48 hours after exposure and prove fatal.
<b>INGESTION:</b>	Swallowing concentrated chemical may cause severe internal injury. Ingestion may result in perforation of the oesophagus.
<b>SKIN:</b>	Corrosive to skin.
<b>EYES:</b>	Risk of serious damage to eye.

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## 12. ECOLOGICAL INFORMATION:

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<b>ECOLOGICAL INFORMATION:</b>	Avoid release to the environment. Prevent contamination of soil, drains or surface water, use appropriate containment method to avoid environmental contamination. Harmful effect due to pH shift. Can cause damage to vegetation.
<b>MOBILITY:</b>	Predicted to have high mobility in soil.
<b>BIO ACCUMULATION:</b>	Low bioaccumulation potential.
<b>DEGRADABILITY:</b>	Neutralised slowly by natural alkalinity.
<b>WATER HAZARD CLASSIFICATION:</b>	Hazard to drinking water supply.

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### 13. DISPOSAL CONSIDERATIONS:

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**DISPOSAL METHODS:** This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.

**WASTE CLASS:** WASTE CODE:0705\*\* HAZARDOUS PROPERTY: H8

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### 14. TRANSPORT INFORMATION:

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**UN No. ROAD:** 2031

**ADR CLASS No.:** 8

**ADR CLASS:** Class 8: Corrosive substances. - Subsidiary class 5.1

**ADR ITEM No.:** 2°(a)1

**HAZARD No. (ADR):** 885 Highly corrosive substance, oxidizing (fire-intensifying).

**ADR MARGINAL:** 2801

**ADR LABEL No.:** 8 + 05

**HAZCHEM CODE:** 2PE

**PROPER SHIPPING NAME I:** NITRIC ACID

**UN No. SEA:** UN 2031

**IMDG CLASS:** 8

**IMDG PAGE No.:** 8195

**IMDG PACK GR.:** I

**SEA TRANSPORT NOTES:** Subsidiary risk label required - class 5.1.

**UN No., AIR:** UN-ID 2031

**ICAO CLASS:** 8

**AIR SUB CLASS:** 5.1

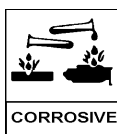
**AIR PACK GR.:** I

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### 15. REGULATORY INFORMATION:

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**LABEL FOR SUPPLY:**



**RISK PHRASES:** R-8 Contact with combustible material may cause fire.

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	R-35 Causes severe burns.
<b>SAFETY PHRASES:</b>	S-1/2 Keep locked up and out of the reach of children. S-23C Do not breathe fumes. S-36 Wear suitable protective clothing. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>UK REGULATORY REFERENCES:</b>	Classification, Packaging and Labelling Regulations 1984. Chemicals (Hazard Information & Packaging) Regulations 1993.

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## 16. OTHER INFORMATION:

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<b>INFORMATION SOURCES:</b>	This product has been classified in accordance with CHIP3 regulations.
<b>REVISION COMMENTS:</b>	Edition 01; Revised item(s):
<b>ISSUED BY:</b>	MK
<b>SDS No.:</b>	317
<b>DATE:</b>	12/07/02
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