



Manufacturers of Instruments for
pH, Redox, Specific Ions,
Conductivity, Salinity,
Dissolved Oxygen,
Humidity, Temperature,
for Research and Industry



Manufacturer : Australian Chemical Reagents
A Division of Roache Analysts Pty Ltd
ACN No 010 524991
Address : 19 Kensal St Moorooka Qld 4105
Phone : (07) 38484828
Fax : (07) 38925936

Date : Sep 2004

MATERIAL SAFETY DATA SHEET

Not Classified as Hazardous According to Criteria of Worksafe Australia

IDENTIFICATION

Product Name : GFR2
TPS Part No : 121812
Description : Reference Filling Gel 2 (2M NH₄(SO₄)), 10 mL

UN Number : None Allocated
Other Names : Nil
Manufacturers Code : GCREF2

Dangerous Goods Class : None Allocated
Subsidiary Risk : None Allocated
Hazchem Code : None Allocated
Poisons Schedule : Not Scheduled

Uses : Analytical Reagent

Physical Description / Properties :

Appearance : Clear gel
Boiling Point (°C) : 100 (approx)
Vapour Pressure (mm of Hg @ 25°C) : 25 (approx)
Specific Gravity : 1
Flash Point (°C) : Not flammable
Flammability Limits (%) : Not flammable
Solubility in Water (g/L) : Completely miscible

Other Properties :

Ingredients :

Chemical Entity	CAS No	Proportion
Ammonium sulphate	[7783-20-2]	13.2%
Hydroxyethyl cellulose	[9004-62-0]	2%
Ethylene glycol	[107-21-1]	10%
Water	[7732-18-5]	to 100%

NH₄(SO₄) Gel

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TPS Pty Ltd
A.B.N. No 30 009 773 371

4 Jamberoo Street
Springwood, Brisbane,
AUSTRALIA, 4127

Phone Australia (07) 32 900 400
International 61 7 32 900 400
Email tps@tps.com.au

Fax Australia (07) 3808 4871
International 61 7 3808 4871
Web www.tps.com.au



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HEALTH HAZARD INFORMATION

Health Effects :

- Swallowed** : May be harmful if swallowed. May cause irritation of the gastric system. For ethylene glycol LDLo human estimated as 1.6g/kg. Oral-rat LD50 6140 - 8540mg/kg.
- Eye** : May be irritating to eye tissue.
- Skin** : May irritate skin tissue with prolonged contact.
- Inhaled** : Not considered a hazard with normal laboratory use.
- Chronic Effects** : No data available.

First Aid :

- Swallowed** : If conscious wash out mouth with water. Seek medical advice. Show this MSDS to medical practitioner.
- Eye** : Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this MSDS to medical practitioner.
- Skin** : Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Show this MSDS to medical practitioner.
- Launder clothing before reuse.
- Inhaled** : Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this MSDS to a doctor.

Advice to Doctor :

Treat symptomatically

PRECAUTIONS FOR USE

- Exposure Limits** : Worksafe : Ethylene glycol (vapour) 60mg/m³ (TWA) 120mg/m³ (STEL)
- Engineering Controls** : Not usually required with normal use.
- Personal Protection** : Not required with normal use.
- Flammability** : Not flammable.



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SAFE HANDLING INFORMATION

Storage & Transport : Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Observe good hygiene and housekeeping practices.

No special transport requirements apply.

Spills & Disposal : Mop up spills and flush to waste if local regulations permit.

Fire/Explosion Hazard : Fire fighters should wear self contained breathing apparatus and impervious clothing if exposure to fumes is likely. Use water spray, foam or dry chemical to control fire situation if compatible with other chemical products in the vicinity. Decomposition products include ammonia.

Other :

References :

Lenga, R.E. (Ed.) *Safety The Sigma Aldrich Library of Chemical Safety Data* Sigma Aldrich Corporation 1985

National Institute for Occupational Safety & Health *NIOSH Pocket Guide to Chemical Hazards* 1990.

Merck & Co Inc. *The Merck Index 11th Ed.* Merck & Co 1989.

International Labour Office *Encyclopaedia of Occupational Health & Safety* Vol 1 & 2 International Labour Office 1983

National Occupational Health & Safety Commission *Exposure Standards for Atmospheric Contaminants in the Occupational Environment* AGPS 1995

National Occupational Health & Safety Commission *List of Designated Hazardous Substances* [NOHSC:10005(1994)] AGPS 1994

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