

**HYDRANAL™ Buffer for Acids****34804-500ML**

Version 2.3 3

Revision Date 12/20/2021

Print Date 07/08/2025

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : HYDRANAL™ Buffer for Acids

SDS Number : 000000020609

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : CHEMSUPPLY AUSTRALIA PTY LTD  
38-50 Bedford St.  
Gillman SA 5013, Australia

For more information call : +61 8 8440 2000  
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**  
:  
: **CHEMTREC in Australia: +(61)-290372994**  
: (24 hours/day, 7 days/week)

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

Classification of the substance or mixture : Flammable liquids, Category 2  
Acute toxicity, Category 3, Oral  
Acute toxicity, Category 3, Dermal  
Acute toxicity, Category 3, Inhalation  
Serious eye damage, Category 1  
Skin corrosion, Category 1C  
Reproductive toxicity, Category 1B  
Specific target organ toxicity - single exposure, Category 1

**GHS Label elements, including precautionary statements**

Symbol(s) :



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Signal word	: Danger
Hazard statements	: Highly flammable liquid and vapour. Toxic if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. Toxic if inhaled. May damage fertility or the unborn child. Causes damage to organs.
Precautionary statements	: <b>Prevention:</b> Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.  <b>Response:</b> IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Remove/ Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  <b>Storage:</b> Store in a well-ventilated place. Keep container tightly closed. Keep cool.

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Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration
Methanol	67-56-1	>= 50 - < 70%
Imidazole	288-32-4	>= 30 - < 50%
Sulphur dioxide	7446-09-5	>= 5 - < 10%

**4. FIRST AID MEASURES**

General advice : First aider needs to protect himself.  
Move out of dangerous area.  
Take off all contaminated clothing immediately.

Inhalation : Move to fresh air.  
Keep patient warm and at rest.  
Call a physician immediately.

Skin contact : Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.

Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Protect unharmed eye.

Ingestion : When swallowed, allow water to be drunk.  
Do NOT induce vomiting.  
Call a physician immediately.

Notes to physician : Treat symptomatically.

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**5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : In case of fire hazardous decomposition products may be produced such as:  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides
- Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
: HAZCHEM Code: 3WE

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Evacuate personnel to safe areas.  
Wear personal protective equipment. Unprotected persons must be kept away.  
Ensure adequate ventilation.  
Remove all sources of ignition.
- Environmental precautions : Should not be released into the environment.
- Methods for cleaning up : Ventilate the area.  
Do not use sparking tools.  
Use explosion-proof equipment.  
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

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**7. HANDLING AND STORAGE**
**Handling**

Advice on safe handling : Wear personal protective equipment.  
Use only in well-ventilated areas.

Advice on protection against fire and explosion : Keep product and empty container away from heat and sources of ignition.  
No smoking.  
Take precautionary measures against static discharges.  
Vapours may form explosive mixtures with air.

**Storage**

Requirements for storage areas and containers : Keep only in the original container, tightly closed, in a well ventilated place.  
Store at room temperature.  
(Ambient temperature: > 0 < 35°C)  
Protect from atmospheric moisture and water.

Materials to avoid : Strong oxidizing agents, Zinc, Alkali metals, Acid chlorides, Acid anhydrides, Acids

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Methanol	67-56-1	TWA : Time Weighted Average (TWA):	200 ppm 262 mg/m3	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A), as amended
		STEL : Short Term Exposure Limit (STEL):	250 ppm 328 mg/m3	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A), as amended
		SKIN_DES : Skin designation:	Can be absorbed through the	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace

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			skin.		Exposure Standards for Airborne Contaminants, Appendix A), as amended
Sulphur dioxide	7446-09-5	TWA : Time Weighted Average (TWA):	2 ppm 5.2 mg/m <sup>3</sup>	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A), as amended
		STEL : Short Term Exposure Limit (STEL):	5 ppm 13 mg/m <sup>3</sup>	12 2011	AU NOEL: Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A), as amended

**Engineering measures**

Use with local exhaust ventilation.

Prevent vapour buildup by providing adequate ventilation during and after use.

**Personal protective equipment**

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection : Impervious butyl rubber gloves  
Gloves must be inspected prior to use.  
Replace when worn.

Eye protection : Safety goggles

Skin and body protection : Wear suitable protective clothing.

Hygiene measures : Take off all contaminated clothing immediately.  
Wash hands before breaks and at the end of workday.  
When using do not eat or drink.

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Do not breathe vapours or spray mist.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: liquid
Colour	: colourless
Odour	: slight, original odour
pH	: 6.5 - 7.2 at , 20 °C
Melting point/range	: Note: No data available
Boiling point/boiling range	: ca. 65 °C at 1,013 hPa Note: The physical data is that of the main component.
Flash point	: 52 °F (11 °C)
Evaporation rate	: Note: No data available
Lower explosion limit	: 5 %(V) Note: The physical data is that of the main component.
Upper explosion limit	: 31 %(V) Note: The physical data is that of the main component.
Vapour pressure	: Note: No data available
Vapour density	: Note: No data available
Density	: 0.960 g/cm <sup>3</sup> at 20 °C
Water solubility	: Note: completely miscible
Partition coefficient: n-	: Note: No data available

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octanol/water

Ignition temperature : 455 °C  
Note: The physical data is that of the main component.

Decomposition temperature : Note: No decomposition if used as directed.

Viscosity, dynamic : Note: No data available

Viscosity, kinematic : Note: No data available

**10. STABILITY AND REACTIVITY**

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Heat, flames and sparks.  
Extremes of temperature and direct sunlight.

Incompatible materials to avoid : Strong oxidizing agents  
Zinc  
Alkali metals  
Acid chlorides  
Acid anhydrides  
Acids

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity  
Methanol : LD50: 5,628 mg/kg  
Species: Rat

Imidazole : LD50: 970 mg/kg  
Species: Rat

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Acute inhalation toxicity  
Methanol: LC50: 64000 ppm  
Exposure time: 4 h  
Species: RatAcute dermal toxicity  
Methanol: LD50: 15,800 mg/kg  
Species: RabbitSkin irritation  
Imidazole: Species: Rabbit  
Result: Causes burns.  
Method: OECD Test Guideline 404Eye irritation  
Imidazole: Species: Rabbit  
Result: Risk of serious damage to eyes.  
Method: OECD Test Guideline 405

Sensitisation

: Note: No data available

Repeated dose toxicity

: Note: No data available

Genotoxicity in vitro

: Note: No data available

Genotoxicity in vivo  
Methanol

: Note: In vivo tests did not show mutagenic effects

Imidazole

: Test Method: Micronucleus test  
Species: Mouse, male and female  
Cell type: Bone marrow  
Application Route: Oral  
Method: OECD Test Guideline 474  
Result: negativeTeratogenicity  
Imidazole

: Species: Rat Application Route: Oral

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No observed adverse effect level: 60 mg/kg body weight  
No observed adverse effect level: 60 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: Embryotoxic effects and adverse effects on the offspring were detected.

**12. Ecological information**

## Toxicity to fish

## Methanol

: LC50: 29,400 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)

## Imidazole

: static test  
LC50: 283.6 mg/l  
Exposure time: 48 h  
Species: Leuciscus idus (Golden orfe)

## Toxicity to daphnia and other aquatic invertebrates

## Methanol

: LC50: 10,000 mg/l  
Exposure time: 24 h  
Species: Daphnia (water flea)

## Imidazole

: static test  
EC50: 341.5 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Method: Directive 67/548/EEC, Annex V, C.2.

## Toxicity to algae

## Imidazole

: static test  
EC50: 133 mg/l  
Exposure time: 72 h  
Species: Desmodesmus subspicatus (green algae)  
Method: DIN 38412

## Toxicity to bacteria

## Methanol

: EC50: 43,000 mg/l  
Exposure time: 5 min  
Species: Photobacterium phosphoreum

EC50: 40,000 mg/l

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Exposure time: 15 min  
Species: Photobacterium phosphoreum

EC50: 39,000 mg/l  
Exposure time: 25 min  
Species: Photobacterium phosphoreum

Biodegradability  
Imidazole : Result: Readily biodegradable.  
Method: OECD Test Guideline 301A

**Other adverse effects**

Additional ecological information : Do not flush into surface water or sanitary sewer system.

**13. DISPOSAL CONSIDERATIONS**

Product : In accordance with local and national regulations.

**14. TRANSPORT INFORMATION****ADR**

UN/ID No. : UN 3286  
Description of the goods : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.  
(METHANOL, IMIDAZOLE)  
Class : 3  
Packing group : II  
Classification Code : FTC  
Hazard Identification Number : 368  
Labels : 3 (6.1, 8)

**IATA**

UN/ID No. : UN 3286  
Description of the goods : Flammable liquid, toxic, corrosive, n.o.s.  
(Methanol, Imidazole)  
Class : 3  
Packing group : II  
Labels : 3 (6.1, 8)

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Packing instruction (cargo aircraft) : 363  
Packing instruction (passenger aircraft) : 352  
Packing instruction (passenger aircraft) : Y340

**IMDG**

UN/ID No. : UN 3286  
Description of the goods : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (METHANOL, IMIDAZOLE)  
Class : 3  
Packing group : II  
Labels : 3 (6.1, 8)  
EmS Number 1 : F-E  
EmS Number 2 : S-C  
Marine pollutant : no

HAZCHEM Code: 3WE

**15. REGULATORY INFORMATION****National regulatory information**

Standard for the Uniform Scheduling of Medicines and Poisons : Schedule 6

**Other international regulations****Notification status**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemicals Act (AICC), as amended : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

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Korea. Existing Chemicals Inventory (KECI)	: On the inventory, or in compliance with the inventory
Philippines. Inventory of Chemicals and Chemical Substances (PICCS)	: On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances (IECSC)	: On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	: On the inventory, or in compliance with the inventory

**16. OTHER INFORMATION****Sources of key data used to compile the Safety Data Sheet:**

1. National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]
2. Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]
3. List of Designated Hazardous Substances [NOHSC:10005(1999)]
4. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]
5. Australian Dangerous Goods Code, No. 6 [National Road Transport Commission]
6. Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP), No. 19 [NDPSC: 2004]
7. National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]

**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Prepared by:  
Honeywell Performance Materials and Technologies Product Stewardship Group

End of Safety Data Sheet