

### 1. Identification of Substance & Company

#### Product

Product name	ROTHENBERGER MAPP
Other names	#56331
Product code	ROMAPP
HSNO approval	HSR002532
Approval description	Gas Under Pressure Mixtures (Flammable) Group Standard 2020
UN number	1077
Proper Shipping Name	PROPYLENE
DG class	2.1
Packaging group	NA
Hazchem code	2WE
Uses	fuel, monomer, plastic manufacture,

#### Company Details

Company	Toolware Sales LTD
Address	3 Stonedon Drive East Tamaki Auckland 2013
Telephone	+64 9 579 8080
Website	www.toolware.co.nz

**Emergency Telephone Number: 0800 764 766**

### 2. Hazard Identification

#### Approval

This product has been approved under the Hazardous Substances and New Organisms Act (Approval HSR002532, Gas Under Pressure Mixtures (Flammable) Group Standard 2020). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020.

#### GHS 7 Classes

Flammable gas Category 1A

#### Hazard Statements

H220 - Extremely flammable gas.  
H280 - Contains gas under pressure; may explode if heated.

#### SYMBOLS

# DANGER



#### Other Classifications

There are no other classifications that are known to apply.

#### Precautionary Statements

<b>Prevention</b>	P103 - Read label before use. P210 - Keep away from ignition sources. No smoking. . P244 - Keep reduction valves free from grease and oil.
<b>Response</b>	P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 - Eliminate all ignition sources if safe to do so.
<b>Storage</b>	P403 - Store in a well-ventilated place.
<b>Disposal</b>	P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

### 3. Composition / Information on Ingredients

Component	CAS/ Identification	Class for ingredient(s)	Conc (%)
Propylene	115-07-1	Flammable gas Category 1A	>99.5%
Propane	74-98-6	Flammable gas Category 1A	<0.5%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

### 4. First Aid

#### General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

**Recommended first aid facilities** Ready access to running water is recommended.

#### Exposure

<b>Swallowed</b>	The product is not considered poisonous. Ingestion is unlikely due to product form (gaseous). In case of persistent symptoms, contact the National Poisons Centre or a Doctor.
<b>Eye contact</b>	If product gets in eyes, this may result in a cold burn. Immediately flush eyes with tepid water or sterile saline solution. Holding eyelids apart, continue to wash for 15 mins. Seek medical advice.
<b>Skin contact</b>	This product is non-irritating to skin. However, contact may result in a cold burn. Remove contaminated clothing and gently flush affected areas with tepid or cold water for 15 minutes. Apply sterile dressing and treat as for a thermal burn. For large burns, immerse in cold water for 15 minutes. DO NOT apply any form of direct heat. Seek immediate medical attention.
<b>Inhaled</b>	Although the gas mixture is non toxic, it is considered to be an asphyxiant. Remove from area of exposure immediately. If assisting a victim avoid becoming a casualty, wear an Air-line respirator or Self Contained Breathing Apparatus (SCBA). Be aware of possible explosive atmospheres. If victim is not breathing apply artificial respiration and seek urgent medical attention. Give oxygen if available. Keep warm and rested. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

#### Advice to Doctor

If frozen tissue has thawed since exposure do not re-warm but apply sterile dressing with loose bandaging. To thaw frozen tissue, place in a warm (41-45°C) water bath for 15 to 60 minutes, or until the skin turns pink or red. Analgesia will be necessary during thawing. For massive exposure, general body temperature may be depressed and patient must be immediately re-warmed by whole-body immersion in a warm (41-45°C) water bath. Shock may occur during re-warming. When thawed, treat as with heat burns.

### 5. Firefighting Measures

<b>Fire and explosion hazards:</b>	Gas may form an explosive mixture in air which can be ignited by many sources such as pilot lights, open flames, electrical motors, switches and static electricity.
<b>Suitable extinguishing substances:</b>	Carbon dioxide, extinguishing powder, foam, fog sprays.
<b>Unsuitable extinguishing substances:</b>	Unknown.
<b>Products of combustion:</b>	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
<b>Protective equipment:</b>	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
<b>Hazchem code:</b>	2WE

**6. Accidental Release Measures**

<b>Containment</b>	If greater than >300 kg (non-permanent gas) or 200 m <sup>3</sup> (permanent gas) is stored emergency response plans to manage any potential gas leak must be in place.
<b>Emergency procedures</b>	Pressurised liquid leaks will immediately vaporise at normal air pressures. Avoid breathing gas. Avoid contact of the liquid with skin and eyes. Clear area of all unprotected personnel. Extinguish or remove all sources of ignition. Switch off power supplies. Shut off leak if safe to do so. Contact emergency authorities and advise of nature of hazard. For bulk containers, evacuate personnel and remove fire sources to beyond those at which the gas detector indicates a gas concentration less than 5% of the lower explosion limit. Regular monitoring is to be carried out until the area is free of dispersed gas. Determine safe distance by use of a combustible gas detector, or at least 50 metres away.
<b>Clean-up method</b>	Increase ventilation.
<b>Disposal</b>	Return empty cylinders to supplier or manufacturer. Inform supplier of leak. Do not attempt to repair leaking valves or cylinder safety devices.
<b>Precautions</b>	Wear appropriate PPE (see section 8).

**7. Storage & Handling**

<b>Storage</b>	Do not store near sources of ignition or incompatible materials. Cylinders should be stored below 45°C in a secure area, upright and restrained to prevent cylinders from falling. Cylinders should also be stored in a dry, well ventilated area constructed of non-combustible material with firm level floor (preferably concrete), away from areas of heavy traffic and emergency exits. Also store removed from oxidizers, nickel carbonyl and oxygen, barium peroxide and chlorine dioxide.
<b>Handling</b>	Before use carefully read the product label. Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

**8. Exposure Controls / Personal Protective Equipment**

**Workplace Exposure Standards**

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m<sup>3</sup> for respirable particulates and 10mg/m<sup>3</sup> for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Propylene	simple asphyxiant	data unavailable
	Propane	simple asphyxiant	data unavailable

**Engineering Controls**

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

**Personal Protective Equipment**

<b>General</b>	Personal Protective Equipment (PPE) should not be used as the primary means of exposure protection, except in the event of an accident or emergency situation or where all other means of protection have proven to inadequate. Clean PPE after use or dispose of as appropriate. Store PPE for re-use in a clean place. Regular training on the correct use of PPE should be provided. In particular the correct fitting and use of respirators and where applicable the cleaning of respirators should be undertaken.
<b>Eyes</b>	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear if leaks are likely especially when handling valves and cylinders.
<b>Skin</b>	Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling cylinders and valves.
<b>Respiratory</b>	Wear an Air-line respirator or self-contained Breathing Apparatus (SCBA), where a risk of inhalation exists.

**WES Additional Information**

Not applicable

## 9. Physical & Chemical Properties

<b>Appearance</b>	colourless gas
<b>Odour</b>	hydrocarbon odour
<b>Odour Threshold</b>	no data
<b>pH</b>	no data
<b>Freezing/melting point</b>	no data
<b>Boiling Point</b>	12.2°C
<b>Flashpoint</b>	-107°C
<b>Flammability</b>	highly flammable
<b>Upper &amp; lower flammable limits</b>	LEL: 2%, UEL: 11%
<b>Vapour pressure</b>	no data
<b>Vapour density</b>	1.5 (air = 1)
<b>Specific gravity/density</b>	0.52
<b>Solubility</b>	not soluble in water
<b>Partition coefficient</b>	no data
<b>Auto-ignition temperature</b>	497°C
<b>Decomposition temperature</b>	no data
<b>Viscosity</b>	gaseous
<b>Particle Characteristics</b>	no data
<b>Volatile materials</b>	100% volatile

## 10. Stability & Reactivity

<b>Stability</b>	This product is unlikely to react or decompose under normal storage conditions. This product will not undergo polymerisation reactions.
<b>Conditions to be avoided</b>	Flammable substance. Keep away from heat and sources of ignition at all times.
<b>Incompatible groups</b>	Oxidizers, Acids.
<b>Hazardous decomposition products</b>	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Water.
<b>Hazardous reactions</b>	No specific hazards.

## 11. Toxicological Information

### Summary

IF SWALLOWED: Ingestion is unlikely due to product form (gaseous).  
 IF ON SKIN: This product is non-irritating to skin. However, contact may result in a cold burn.  
 IF IN EYES: If product gets in eyes, this may result in a cold burn.  
 IF INHALED: Although the gas mixtures are non toxic, they may be considered to be asphyxiants.

### Supporting Data

<b>Acute</b>	<b>Oral</b>	This mixture is not acutely toxic if swallowed. Unlikely form of exposure (gaseous). This mixture is not considered an aspiration hazard (gaseous). No evidence of dermal toxicity. The substance is not considered acutely toxic if inhaled by the EPA. The gasses may be asphyxiants.
	<b>Aspiration</b>	
<b>Chronic</b>	<b>Dermal</b>	This mixture is not considered to be an eye irritant. This mixture is not considered to be a skin irritant. No ingredient present at concentrations > 0.1% is considered a sensitizer. No ingredient present at concentrations > 0.1% is considered a mutagen. No ingredient present at concentrations > 0.1% is considered a carcinogen. No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. No ingredient present at concentrations > 1% is considered a target organ toxicant. None known.
	<b>Inhaled</b>	
	<b>Eye</b>	
	<b>Skin</b>	
	<b>Sensitisation</b>	
	<b>Mutagenicity</b>	
	<b>Carcinogenicity</b>	
<b>Reproductive / Developmental</b>		
<b>Systemic</b>		
<b>Aggravation of existing conditions</b>		

## 12. Ecological Data

### Summary

This products are not considered ecotoxic.

### Supporting Data

<b>Aquatic Degradability</b>	The estimated LC <sub>50</sub> for the mixture is >100mg/L. This product is a gas and will not accumulate in the soil or water or cause long term problems.
<b>Soil</b>	No data available for the mixture. This product is a gas and is not considered to be harmful in the soil environment.
<b>Terrestrial vertebrate</b>	The mixture is not considered to be harmful towards terrestrial vertebrates. The LD <sub>50</sub> is likely to be >5000mg/kg and the LC <sub>50</sub> (diet) is >5000mg/kg.
<b>Terrestrial invertebrate</b>	No data for the mixture. None of the ingredients are considered toxic towards terrestrial invertebrates.
<b>Biocidal action</b>	This mixture is not considered biocidal

## 13. Disposal Considerations

<b>Restrictions</b>	There are no product-specific restrictions, however, local council and resource consent conditions may apply.
<b>Disposal method</b>	Cylinders should be returned to the supplier or manufacturer for recycling.

## 14. Transport Information

### Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangerous good for transport.

<b>UN number:</b>	1077	<b>Proper shipping name:</b>	PROPYLENE
<b>Class(es)</b>	2.1	<b>Packing group:</b>	NA
<b>Precautions:</b>	Flammable gas	<b>Hazchem code:</b>	2WE

## 15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002532, Gas Under Pressure Mixtures (Flammable) Group Standard 2020.  
All ingredients appear on the NZIoC.

### Specific Controls

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing any quantity.
Labelling	No removal of labels and/or decanting of product into other cylinders can occur.
Emergency response plan	Required if >100 kg (non-permanent gas) or 100 m <sup>3</sup> (permanent gas) is stored.
Certified handler	Not required.
Tracking	This substance is not required to be tracked.
Signage	Required if > 250 kg (non-permanent gas) or 500 m <sup>3</sup> (permanent gas) is stored in any one location.
Location compliance certificate	Required if > 100 kg (non-permanent gas) or 200 m <sup>3</sup> (permanent gas) is stored in any one location. Where substance is manufactured or used if >50 kg (non-permanent gas) or 50 m <sup>3</sup> (permanent gas) is present.
Flammable zone	Must be established if 100 kg (non-permanent gas) or 30 m <sup>3</sup> (permanent gas) is stored.
Fire extinguisher	If >10 kg (non-permanent gas) or 10 m <sup>3</sup> (permanent gas) present.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

### Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

**16. Other Information**

**Abbreviations**

<b>Approval Code</b>	Approval HSR002532, Gas Under Pressure Mixtures (Flammable) Group Standard 2020 Controls, EPA. <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
<b>CAS Number</b>	Unique Chemical Abstracts Service Registry Number
<b>EC<sub>50</sub></b>	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
<b>EPA</b>	Environmental Protection Authority (New Zealand)
<b>GHS</b>	Globally Harmonised System of Classification and Labelling of Chemicals, 7 <sup>th</sup> revised edition, 2017, published by the United Nations.
<b>HAZCHEM Code</b>	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
<b>HSNO</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>IARC</b>	International Agency for Research on Cancer
<b>LEL</b>	Lower Explosive Limit
<b>LD<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>LC<sub>50</sub></b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>NZIoC</b>	New Zealand Inventory of Chemicals
<b>MSDS (SDS)</b>	Material Safety Data Sheet (or Safety Data Sheet)
<b>STEL</b>	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
<b>STOT RE</b>	System Target Organ Toxicity – Repeated Exposure
<b>STOT SE</b>	System Target Organ Toxicity – Single Exposure
<b>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UEL</b>	Upper Explosive Limit
<b>UN Number</b>	United Nations Number
<b>WES</b>	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

**References**

<b>Data</b>	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
<b>Controls</b>	EPA notices, <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> , Health and Safety at Work (Hazardous Substances) Regulations 2017, <a href="http://www.legislation.govt.nz">www.legislation.govt.nz</a>
<b>WES</b>	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .
<b>Other References:</b>	Suppliers SDS

**Review**

<b>Date</b>	<b>Reason for review</b>
December 2018	Not applicable – new SDS
December 2023	5 yearly update

**Disclaimer**

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS 7 classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email [info@datachem.co.nz](mailto:info@datachem.co.nz) or phone: +64 21 1040951.

