

Section 1. Identification of the material and the supplier

Product: **BernzOmatic MAP-PRO® Cylinder**
 Product Code: 1811120 CYLINDER MAP-PRO 399.7G YELLOW
 Product Use: Soldering and brazing applications
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Bromic Group**
 Address: **PO Box 58931**
Botany, Auckland, 2163
 Telephone: 0508 276 642

Emergency Telephone: 0508 276 642
0800 764 766 (National Poison Centre)

Date of SDS Preparation: 22 May 2017

Section 2. Hazards Identification

This substance is hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

EPA Approval No: Compressed Gases (Flammable) – HSR002532

Pictograms



Flammable

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
2.1.1A	H220	Extremely flammable gas.	Category 1

Prevention Code	Prevention Statement
P103	Read label before use.
P210	Keep away from heat & hot surfaces. No smoking.

Response Code	Response Statement
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381	Eliminate all ignition sources if safe to do so.

Storage Code	Storage Statement
P403	Store in a well-ventilated place.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Propane	0 - 0.5	74-98-6
Propylene	99.5 - 100	115-07-1

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Seek immediate medical attention.
If on Skin	In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. If frostbite occurs, immerse involved area in lukewarm water (20-30°C). Keep immersed for 20-40 minutes. Seek immediate medical attention.
If Swallowed	Rinse mouth. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Section 5. Fire Fighting Measures

Hazard Type	Flammable Compressed Gas
Hazards from combustion products	Hazardous combustion products include oxides of carbon and various hydrocarbons.
Suitable Extinguishing media	Water fog, foam, dry chemical, halon or carbon dioxide.
Precautions for firefighters and special protective clothing	When fighting a major fire wear self-contained breathing apparatus and protective equipment. Product is extremely flammable. Vapours are heavier than air and may travel considerable distances to a source of ignition where they can ignite, flashback, or explode. Do not attempt to extinguish fire until gas source is located. Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.
HAZCHEM CODE	2YE

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Stop leak if safe to do so and allow the product to evaporate.
In the event of a major spill, prevent spillage from entering drains or water courses.

Section 7. Handling and Storage**Precautions for Handling:**

- Read label before use.

- Keep away from heat & hot surfaces. No smoking.
- Use only with adequate ventilation.
- Take precautionary measures against static discharge.
- Food, beverages and tobacco products should not be stored or consumed where this material is in use.
- Always wash hands before smoking, eating, drinking or using the toilet.
- Wash contaminated clothing and other protective equipment before storage or re-use.
- Provide eyewash fountains and safety showers in close proximity to points of potential exposure.
- **Precautions for Storage:**
- Store in a tightly closed original container in a cool, dry, and well ventilated area.
- Protect from heat, sparks, open flames and other sources of ignition.
- Do not expose to temperatures exceeding 50 °C.
- Keep away from strong oxidising agents, strong acids and halogens.
- Store away from combustible materials.
- Do not attempt to refill containers.
- Do not weld, cut or drill on full or empty containers.
- Handling equipment must be grounded to prevent sparking.
- In areas where explosion hazard exists workers should be required to wear non-sparking boots.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
1-Propene [115-07-1] (asphyxiant)				
Propane [74-98-6] (asphyxiant)				

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

Engineering Controls

Maintain air concentration below occupational exposure standards, providing adequate ventilation. Use explosion-proof ventilating equipment.

Personal Protection Equipment

Eyes	Wear goggles with side shields.
Hands and Skin	Wear gloves and protective clothing that are impervious to the product for the duration of the anticipated exposure. Safety shoes are recommended when handling cylinders.
Respiratory	Use an approved self-contained breathing apparatus where oxygen levels cannot be maintained above 19.5% (e.g. generation of high concentrations of vapour, inadequate ventilation) and engineering controls are not feasible.

Section 9 Physical and Chemical Properties

Appearance	Colourless gas
Odour	Hydrocarbon odour (or mercaptan if odourised)
Odour Threshold	Not available
pH	Not applicable
Boiling Point	-48°C
Melting Point	-185°C

Freezing Point	Not available
Flash Point	-108°C
Flammability	Extremely flammable
Upper and Lower Explosive Limits	2 % - 11%
Vapour Pressure @ 20°C	1034.21 kPa
Vapour Density	1.5 @ 0°C
Relative Density	0.52 (liquid)
Solubility in water	Slight
Partition Coefficient:	Not available
Auto-ignition Temperature	497°C
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not applicable
% Volatiles by weight	100%

Section 10. Stability and Reactivity

Stability of Substance	Stable at ambient temperature and under normal conditions of use.
Conditions to Avoid	Heat, sparks, open flames and other sources of ignition.
Incompatible Materials	Strong oxidising agents, strong acids and halogens.
Hazardous Decomposition Products	Oxides of carbon and various hydrocarbons.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	May cause anesthetic effects, Central Nervous System (CNS) depression, headache, drowsiness and dizziness. Extremely high concentrations may cause asphyxiation and death by displacing oxygen from the atmosphere.
Eye	Eye contact may cause cold burns or frostbite.
Skin	Skin contact may cause cold burns or frostbite.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method: Do not attempt to dispose of residual or unused product in the container. Return it to your supplier.

Precautions: None known.

Disposal methods to avoid: Do not pierce or burn.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Road and Rail Transport

UN No: 1077
Class-primary 2.1
Packing Group Non allocated
Proper Shipping Name: PROPYLENE

Air Transport

UN No: 1077
Class-primary 2.1
Packing Group Non allocated
Proper Shipping Name: PROPYLENE

Marine Transport

UN No: 1077
Class-primary 2.1
Packing Group Non allocated
Proper Shipping Name: PROPYLENE

Section 15 Regulatory Information

EPA Approval Code: Compressed Gases (Flammable) – HSR002532

HSNO Classification: 2.1.1A

HSNO Controls:
Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	100L/kg
Location Certificate	100kg
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250kg
Emergency Response Plan	300kg
Restriction of Use	None

Section 16 Other Information

Glossary

EC₅₀ Median effective concentration.
EEL Environmental Exposure Limit.
EPA Environmental Protection Authority
HSNO Hazardous Substances and New Organisms.
LC₅₀ Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD₅₀ Lethal dose to kill 50% of test animals/organisms.
LEL Lower explosive level.

OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

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Please contact the New Zealand distributor, if further information is required.

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