according to HSNO Act 1996

Printing date 18.08.2017 Revision: 18.08.2017

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: TORCH GAS CANISTER P/N 2203(220G), P/N 2204(325G)

Other Means of Identification: Mixture

Other Name: Gas Torch Kits P/N 211289 (uses 2203), P/N 211312 (uses 2203).

Recommended Use of the Chemical and Restriction on Use: Fuel, commercial and industrial applications.

Details of Manufacturer or Importer:

Sutton Tools (NZ) Ltd 80A Hunua Road,

Papakura, Auckland, New Zealand, 2110

Phone Number: +64 9 295 0135

Emergency telephone number: +64 21 923 509

2. HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2007 Transport of Dangerous Goods on Land.



Flammable Gases 1 H220 Extremely flammable gas.



Press. Gas L H280 Contains gas under pressure; may explode if heated.

HSNO Classification 2.1.1A - Flammable gas - high hazard.

Signal Word Danger

Hazard Statements

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381 Eliminate all ignition sources if safe to do so.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:			
106-97-8	Butane	♦ Flammable Gases 1, H220; ♦ Press. Gas C, H280	45%
75-28-5	Propane, 2-methyl-	♦ Flammable Gases 1, H220; ♦ Press. Gas C, H280	28%
74-98-6	Propane	♦ Flammable Gases 1, H220; ♦ Press. Gas C, H280	26%

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4. FIRST AID MEASURES

Inhalation:

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility and consciousness. Victim may not be aware of asphyxiation. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

Contact with evaporating liquid may cause frostbite or freezing of skin. Thaw frosted parts with lukewarm water. Do not rub affected area. Do not use hot water. Cryogenic (low temperature) burns which result in blistering or deeper tissue freezing should be promptly treated by a physician.

Eye Contact:

In case of eye contact, rinse cautiously with water or saline solution for several minutes until no chemical remains. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:

Ingestion is not considered a potential route of exposure. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: Simple asphyxiant. May affect central nervous system and cause headache, dullness, difficulty in breathing, drowsiness, and losing consciousness. In high concentrations may cause asphyxiation. Symptoms may include loss of mobility and consciousness. Victim may not be aware of asphyxiation. 19,000ppm concentration may cause immediate danger to life or health.

Skin Contact: Contact with liquid may cause frostbite and blistering.

Eye Contact: Contact with liquid may cause frostbite and loss of eyesight.

Ingestion: Gas ingestion is not likely to occur. However, may cause frostbite on the lips, mouth, and membrane if liquid is swallowed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, powder, water spray and water fog.

Specific Hazards Arising from the Chemical:

Extremely flammable gas. Vapours are heavier than air and may travel along the ground and collect in low or confined areas and be exposed to a source of ignition (pilot light, heater, electric motor) some distance away and backfire. Containers may burst or explode if exposed to heat or spark. Low electrical conduction may cause static electricity, and be ignited by a spark.

Shut off gas source and allow the fire to burn itself out. Gas fires should not be extinguished unless the gas flow can be stopped immediately. If gas source cannot be shut off immediately, fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool container with flooding quantities of water until well after fire is out to prevent container from exploding.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation, ventilate the closed place before entering. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

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Methods and Materials for Containment and Cleaning Up:

Eliminate all sources of ignition and stop leak if safe to do so. Secure the cylinder and slowly discharge the gas to the atmosphere in a well-ventilated area or outdoors. Vapour can be dispersed with sustained water spray. Use only non-sparking tools.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours or gas. Use in a well-ventilated area since use in the airtight place may cause explosion and suffocation. 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.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Protect from direct sunlight, heat, sparks, open flames and hot surfaces. Do not expose to temperatures exceeding 40 °C. Close container valve after each

use and when empty, even if still connected to equipment. Ground / bond container and receiving equipment. Take precautionary measures against static discharge. Keep away from strong oxidisers, nitric acid, chlorine dioxide, carbonyl nickel and acid. Leave valve

protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. Damaged valves should be reported immediately to the supplier

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards	Exposure Standards:	
106-97-8 Butane		
WES TWA: 1900 mg/	m³, 800 ppm	
74-98-6 Propane		
WES Simple asphyxia	ant; may present an explosion hazard	

Engineering Controls:

Local exhaust and general ventilation are necessary in work area to prevent accumulation of explosive mixtures. Provide special ventilation in sumps and confined spaces. Use explosion-proof ventilating equipment. Gas detectors should be used when quantities of flammable gases or vapours may be released

Respiratory Protection:

Use approved full face supplied air respirator if high airborne concentrations of the material are present. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Leather, wool or aramid blend gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against gas. See Australian/New Zealand Standard AS/NZS 1337.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form: Liquid and vapour

Colourless

Odour: Occasionally smells like rotten garlic, otherwise odourless.

Odour Threshold: No information available

pH-Value: Not applicable

Melting point/freezing point: -138.3 °C (N-Butane)

-160 °C (Iso-Butane) -187.7 °C (Propane)

Initial Boiling Point/Boiling Range: -0.5 °C (N-Butane)

-11.5 °C (Iso-Butane)

-42.1 °C (Propane) Flash Point: -73.3 °C (N-Butane)

-88.0 °C (Iso-Butane) -104.4 °C (Propane)

Flammability: Extremely flammable

Auto-ignition Temperature: 287 °C (N-Butane)

460 °C (Iso-Butane) 466.1 °C (Propane)

Decomposition Temperature: No information available

Explosion Limits:

Upper:

Lower: 1.9 Vol % (N-Butane)

1.8 Vol % (Iso-Butane) 2.2 Vol % (Propane) 8.4 Vol % (N-Butane)

8.4 Vol % (Iso-Butane) 9.5 Vol % (Propane)

Vapour Pressure: 0.214MPa @21.1 °C (N-Butane)

0.304MPa @20 °C (Iso-Butane) 0.75MPa @20 °C (Propane)

Density: Not determined.

Relative Density: 0.549 (water = 1) @20 °C (N-Butane)

0.549 (water = 1) @20 °C (Iso-Butane) 0.501 (water = 1) @20 °C (Propane)

Vapour Density: 2.1 (air = 1) @20 °C (N-Butane)

2.595 (air = 1) @20 °C (Iso-Butane) 1.55 (air = 1) @20 °C (Propane)

Evaporation Rate: 100 %

Solubility in Water: 3.25ml/100ml@20 °C (N-Butane)

0.007g/100ml@20 °C (Propane)

Partition Coefficient (n-octanol/water): 2.89 as log POW (N-Butane)

2.8 as log POW (Iso-Butane)
2.36 as log POW (Propane)
No information available

Viscosity:No information availableVOC:No information available

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions:

Can form a potentially explosive atmosphere in air. May react violently with oxidants.

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Product Name: TORCH GAS CANISTER P/N 2203(220G), P/N 2204(325G)

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Chemical Stability: Stable at a normal temperature and pressure.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces, direct sunlight and temperature above 40°C.

Incompatible Materials: Strong oxidisers, nitric acid, chlorine dioxide, carbonyl nickel and acid.

Hazardous Decomposition Products: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Toxicity:

	LD ₅₀ /LC ₅₀ Values Relevant for Classification:	
Г	106-97-8 Butane	
Г	Inhalation LC ₅₀ /4 h 658 mg/l (rat)	
Г	74-98-6 Propane	
	Inhalation LC _{so} /4 h 658 mg/l (rat)	

Acute Health Effects

Inhalation:

Simple asphyxiant. May affect central nervous system and cause headache, dullness, difficulty in breathing, drowsiness, and losing consciousness. In high concentrations may cause asphyxiation. Symptoms may include loss of mobility and consciousness. Victim may not be aware of asphyxiation. 19,000ppm concentration may cause immediate danger to life or health.

Skin: Contact with liquid may cause frostbite and blistering.

Eye: Contact with liquid may cause frostbite and loss of eyesight.

Ingestion:

Gas ingestion is not likely to occur. However, may cause frostbite on the lips, mouth, and membrane if liquid is swallowed.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: May cause the same symptoms as acute exposure.

Existing Conditions Aggravated by Exposure: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity: No information available

Aquatic toxicity: No information available

Persistence and Degradability: No information available

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Bioaccumulative Potential: No information available

Mobility in Soil: No information available Other adverse effects: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14. TRANSPORT INFORMATION

UN Number

IMDG, IATA

NZS 5433 UN2037 **IMDG, IATA** UN2037

Proper Shipping Name

NZS 5433 RECEPTACLES, SMALL, CONTAINING GAS (GAS

CARTRIDGES) without a release device, non-refillable RECEPTACLES, SMALL, CONTAINING GAS (GAS

CARTRIDGES) without a release device, non-refillable

Dangerous Goods Class

NZS 5433 2.1 **IMDG Class:** 2.1

Packing Group:

NZS 5433 Not applicable IMDG Not applicable

IATA Passenger and Cargo Aircraft - Packaging Instructions

Y203 - Max.Net Qty/Pkg 1 kg

Cargo Aircraft Only - Packaging Instructions 203 -

Max.Net Qty/Pkg 15 kg

Hazchem Code: 2T

Special Provisions: 191, 277, 303, 344

Limited Quantities: 1L
Excepted quantities (EQ) E0

Packagings & IBCs - Packing Instruction: P003

Packagings & IBCs - Special Packing Provisions: PP17

15. REGULATORY INFORMATION

HSNO Approval Code / Group Standard:

Group Standard: Compressed Gas Mixtures (Flammable) Group Standard 2006

HSNO Approval Number: HSR002532

New Zealand Inventory of Chemicals

All ingredients are listed.

16. OTHER INFORMATION

Date of Preparation or Last Revision: 18.08.2017

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Prepared by: MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds LC_{so}: Lethal concentration, 50 percent LD_{so}: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit TWA: Time Weighted Average WES: Workplace Exposure Standard

Flammable Gases 1: Flammable gases – Category 1 Press. Gas C: Gases under pressure – Compressed gas Press. Gas L: Gases under pressure – Liquefied gas

Disclaimer

This SDS is prepared in accord with the New Zealand Chemical Industry Council document 'Code of Practice (No. HSNO CoP 8-1 09-06)'.

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