

Material Safety Data Sheet (MSDS)

according to 1907/2006/EC, Article 31

1 Identification of the substance/preparation and of the company

.Product details

.Product name: Macquarie Butane Gas

.Application of the substance: For fuel, aerating agent and aerosol,
etc. .Supplier/Manufacturer in china

Distributor by Road Runner CO.Pty Ltd Australia 03 9303 9449 Sam

For Emergencies call 000

This information supplier to Road Runner CO.Ltd by its overseas supplier China

.Classification according to Directive 67/584/EEC or Directive 1999/45/EC



F+ Extremely flammable.

R12: Extremely flammable gas

S1: Keep it sealed.

S2: Store it in a place where kids cannot touch it.

S7: Keep container tightly closed.

. Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and Literature data.

.Label elements

. Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS02 Flame

. Hazard-determining components of labelling:

reaction product: Butane (number average molecular weight is

(58.12) · Hazard statements

H220 : Extremely flammable gas

H208: Contains gas under pressure; may explode if heated.

.Routes of Exposure: Skin, eyes and inhalation.

Potential Health Effects:

.Inhalation: If the gas from processing is inhaled, it will cause irritation to respiratory tract and symptoms include cough, sore throat or headache.

.Ingestion: It causes nausea or vomiting. If it is swallowed in large quantity, it will do great harm to body and symptoms may

include dizziness, weakness or bellyache.

.Contact with Skin: Irritated under long-term usage.

.Contact with Eyes: It causes irritation to eyes and symptoms include reddening and tearing. .Effects of Overexposure - Chronic: Not found.

.Carcinogenicity Information: Not found.

3 Composition/information on ingredients

.Description: This product is a kind of mixture.

.Description: Mixture of substances listed below with nonhazardous additions. For the wording of the listed risk phrase refer to section 15

Dangerous ingredients		
CAS No: 106-97-8	Butane	100%
EINECS No: 203-448-7	 F++ R12	
	 GHS02:H220	

4 First aid measures

Persons using these products should consult a physician or other medical professional if an accident involving these products in injury. Specific first-aid measures are as follows:

.Inhalation: If any adverse effect occurs as a result of inhalation of excessive gas from processing, remove individual to fresh air. If there is difficulty in breathing, give artificial breathing if necessary and get medical attention.

.Eye Contact: Immediately raise eyelids and flush with water for at least 15 minutes. If things don't get better, seek medical attention.

.Skin Contact: In case of contact of this product when it is being processing, flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothes and shoes. If irritation persists, get medical attention.

.Ingestion: Do not induce vomiting without professional instructions, but get medical attention immediately.

.Recommendations to physicians: Treat symptoms.

5 Fire Fighting Measures

.Flash point: Not available

.Flammable/Explosive Limits-Lower Vol %: Not applicable

.Flammable/Explosive Limits-Upper Vol %: Not applicable

.Extinguishing Media: Dry chemical powder for small fire; Water spray, or alcohol resistant foam for large fire.

.Special Firefighting Procedures: Structural firefighters must wear self-contained breathing Apparatus and full protective equipment. If protective clothing is not available, fight fire from a protected location or safe distance.

.Unusual Fire and Explosion Hazards: If involved in a fire, this product will ignite. Products of thermal decomposition can include carbon monoxide, carbon dioxide and water.

6 Accidental release measures

.Person-related safety precautions: General Information: Use proper personal protective equipment as indicated in Section 8. Keep unprotected persons away.

.Measures for Cleaning/Collection:

.Small Spill: Absorb the leakage with suitable inert materials.

.Large Spill: Collect the leakage by building dikes or trenches, then remove it to a tanker or container by a pump and dispose it

strictly according to relevant rules at last.

Additional Information:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment. See

Section 13 for disposal information.

7 Handling and storage

.Storage:

Keep container tightly sealed. Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace and keep ignition sources away.

Keep the temperature of the storage in a proper range

Keep containers closed when they are not in use.

The storage area should be equipped with emergency equipments for leakage.

.Handling:

Operators must attend professional training and must operate strictly according to related rules. Keep away from fire and forbid smoking in working area.

Prevent the steam from leaking into the air of working area.

Carry it carefully and lay it down lightly in order to avoid damages of packages or containers.

Equip with relevant facilities for accidental release or fire.

8 Exposure controls/personal protection

.Ventilation and Engineering controls:

Ingredient Name	CAS	Workplace exposure limit	
		Long-term exposure limit(8-hour TWA reference period) mg.m ⁻³	Short-term exposure limit(15-minute reference period) mg.m ⁻³
Butane	106-97-8	600 ppm 1450 mg.m ⁻³	750 ppm 1810 mg.m ⁻³

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate gas or powder, use ventilation to keep exposure to airborne contaminants below the exposure limit.

.Personal Protection (for workers):

.Respiratory Protection:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

.Body Protection:

Wear antitoxic and protective uniforms.

.Protection of Hands:



Wear appropriate protective gloves to prevent skin exposure.

.Eye Protection:



Tightly sealed goggles

Chemical goggles or face shield.

.General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

.Glove Materials: Choose the ones with proper materials and high quality.

9 Physical and chemical properties

.General Information

Form:	Gas
Odor:	Odorless if unstenched
Color:	Colorless

.Change in condition

Melting point/Melting range:	-138.35°C °C
Boiling point/Boiling range:	-0.5°C

.Flash point: 45

.Ignition Temperature: 287

.Self-Igniting: This product is not self-igniting

.Flammable/Explosive Limits-Lower Vol %: 1.5

.Flammable/Explosive Limits-Upper Vol %: 8.5

.Relative density (20°C): 0.58

.Gasdensity: Not available

.Evaporation rate 2.05

.Solubility in/Miscibility with

Water: Soluble in water

.PH-Value: Not available

.Viscosity (25°C): Not available

.Dynamic: Not available

10 Stability and reactivity

.Chemical Stability: Stable under normal conditions.

.Condition to Avoid: Open flame, spark and high temperatures.

.Incompatible Materials: None known.

.Hazardous Decomposition Products: Products of thermal decomposition can include carbon monoxide and nitrogen oxides. .Hazardous polymerizations: It will not occur.

11 Toxicological information

LD 50 data of some components are shown in the table below:

Ingredient Name	CAS No.	LD50(Oral, rat)
Butane	106-97-8	658000ppm

.Potential Health Effects:

.Inhalation: If the gas from processing is inhaled, it will cause irritation to respiratory tract and symptoms include cough, sore throat or headache.

.Ingestion: It causes nausea or vomiting. If it is swallowed in large quantity, it will do great harm to body and symptoms may include dizziness, weakness or bellyache.

.Contact with Skin: It causes irritation and allergy, symptom may include redness and dermatitis. .Contact with Eyes: It causes irritation to eyes and symptoms include reddening and tearing. .Effects of Overexposure - Chronic: Not found.

.Carcinogenicity Information: Not found.

.Ecotoxical effects: All work practices must be aimed at eliminating environmental contamination.

.Additional ecological information:

.AOX-Indication: This product does not contain organically bonded halogen compounds. .Effect of material on aquatic life: It does not do harm to aquatic life.

.General Notes:

Do not allow product to reach ground water, water course or sewage system.

.Waste from residues: Dispose of in accordance with local regulations.

.Land transport(ADR/RID):

ADR

14.1 UN No. : 1057

14.2 UN Proper Shipping : RECEPTACLES, SMALL, CONTAINING GAS(GAS CATRIDGES)

14.3 Transport Hazard : 2

Class

Danger label (primary risk): 2.1

14.5 Environmental Hazard : No

14.6 Special Precautions : Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

.TSCA8 (b) Inventory Status: Butane.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

.Sources of key data used to compile the data sheet: European Chemicals Bureau

.DISCLAIMER: The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

.Department issuing MSDS: Shandong Shengya Group Ltd.

.Contact: Shandong Shengya Group Ltd.

Tel: +86-539-2911500 2193222

.Relevant phrase:

R12 : Extremely flammable gas

H220 : Extremely flammable gas

H208: Contains gas under pressure; may explode if heated.

S24: Avoid contact with skin

S25: Avoid contact with eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S36:

Wear suitable protective clothing

S37: Wear suitable gloves

S1: Keep it sealed.

S2: Store it in a place where kids cannot touch it.

S7: Keep container tightly closed.

S62: Do not induce vomiting if it is swallowed. Seek medical attention immediately and show the label or container to the doctor. · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LD50: Lethal dose, 50 percent

· * Data compared to the previous version altered.

The End

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