

Aerosol Gas Company

MATERIAL SAFETY DATA SHEET

Section 1 Identification

Edit Foundation: GHS Fifth Revised Edition

Edit Date: January .10, 2019

Available Period: See Section 16 for more description

Product Name: PROPYLENE/PROPANE AND DIMETHYL ETHER

Product Use: Fuel

UN Proper Shipping Name: LIQUEFIED GAS, FLAMMABLE

Manufactured by: Ningbo Koman's Refrigeration Industry Co.,Ltd.

Address: No.20 Yongdinghe Road, chemical industry park, Xiapu, Beilun, Ningbo.

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24HR Emergency number for CHEMTREC is 800-424-9300. Our file # 694768

Section 2 Hazard Identification

GHS Classification:

Health	Environmental	Physical
Acute Toxicity: Oral, Dermal-Not detected	Aquatic Toxicity: Not Classify: Hazardous to the ozone Layer: Unknown	Flammable Gases: Category 1 Gases under Pressure: Liquefied Gas
Skin Corrosion: Unknown		
Eye Corrosion: Unknown		
Skin Sensitization: Unknown		
Mutagenicity: Unknown		
Carcinogenicity: Unknown		
Reproductive Toxicity: Unknown		
Target Organ Toxicity: Unknown		

GHS label:

Symbols:



Signal Words: Danger

Hazard Statements:

H220 Extremely flammable Gas

H280 Contents 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.

Section 3 Composition/Information on Ingredients

Component	CAS No.	Weight %
PROPYLENE	115-07-01	36-44
PROPANE	74-98-6	18-22
DIMETHYL ETHER	115-10-6	36-44

Section 4 First-aid Measures

Health hazards:

This product has a simple suffocation and anesthetic effects. The body short contact 1% propane does not cause symptoms. Concentrations below 10%, causing only mild dizziness. Exposure to high concentrations can appear anesthesia, loss of consciousness. High concentrations can cause suffocation.

Inhalation:

If breathed in, move person into fresh air. Keep breathing smooth. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Consult a physician.

Skin:

This product is liquefied gas. Contacting lots of liquefied propane may send skin frostbite. If the skin feels uncomfortable, seek immediate medical assistance.

Eye:

This product is liquefied gas, it may damage the eyes.

Ingestion:

If swallowed, seek immediate medical assistance.

Section 5 Fire-fighting Measures

Product hazard characteristics:

Extremely flammable gas. Mixed with air can produce an explosive mixture. If contact with

heat or fire, it may burn explosion. After contact with other oxidants, it can occur violent chemical reaction. Gas has greater density than air. It can spread to faraway places in the lying areas, and will catch fire while contact with fire.

Flammability Limits:

PROPYLENE Lower explosion limit 2.0%(V/V) : Upper explosion limit 11.7%(V/V)

PROPANE Lower explosion limit 2.1%(V/V):Upper explosive limit:9.5%(V/V)

DIMETHYL ETHER Lower explosion limit 3%(V/V):Upper explosive limit:17%(V/V)

Extinguishing Media: carbon monoxide, carbon dioxide

Fire fighting methods:

Cut off the gas supply, if you can't cut off the gas source, not allowed to put out the flame leak. Douse the containers, if possible, transfer the containers from the fire to the open place.

Extinguishing Media:

Water spray, foam, dry powder, carbon dioxide: Use water mist spray mass burning fire.

Protective Equipments for Fire Fighting:

Wear body fire-fighting equipment, wear self-contained breathing apparatus and protective clothing.

Section 6 Accidental Release Measures

Personnel protection:

Persons should leave quickly from the pollution area to windward, and be isolated, and access restricted. Recommended emergency personnel wear self positive pressure respirator, wear protective clothing.

Leakage treatment:

Cut off the source of leakage. Cover the drain near the leak with industrial covering layer or adsorbent, to avoid the gas into the drain causing explosion dangerous.

Environmental preventive measures:

The reasonable ventilation, accelerated derision, Spray of water to cool, dilution.

Cleaning method:

Build embankments or dig pits to collect large amounts of wastewater from the treatment process. If possible, send the leaking air to an open area with an exhaust fan or install an appropriate nozzle and burn it off. It is also possible to move the leaking container to an open area and pay attention to ventilation. The leakage container should be properly handled, repaired and inspected before being used again.

Section 7 Handling and Storage

Handling Procedures:

The operator should undergo professional training and observe the rules of the rules of the operation strictly. Closed operation, full ventilation. Mechanical equipment or tools which can produce spark easily can't be used.

Storage Procedures:

Store in a cool, dry and well-ventilated warehouse. Storage area temperature should not exceed 30 °C. Keep away from fire, heat and direct sunlight. Keep the container sealed. The container should be protected against fire. The amount of canning should be adequate, not overpressure filling. Storage should be separated from oxygen, compressed air, chlorine or other oxidants. Storage space lighting, ventilation equipment should be explosion-proof, switch located outside the storage area. Equipped with the appropriate variety and quantity of fire equipment. Open storage tanks should have cooling devices in summer.

Section 8 Exposure Controls/Personal Protection

Engineering control:

GBZ 2.1-2007 Occupational exposure limits for hazardous agents in the workplace
Chemical hazardous agents: not listed.

America TLV-TWA: 300 mg/ m³

The production process should be closed and ventilated. Smoking, eating and drinking are strictly prohibited in the workplace. Avoid high temperature and fire sources.

Respiratory Protection:

Wear a self-inhalation filter mask or self-contained breathing apparatus.

Body protection: Wear anti-static clothing.

Eye Protection: Contacting with high concentrations should wear chemical safety glasses.

Hand protection: Wear the general working gloves.

Other protection:

Smoking is strictly prohibited in the workplace. Avoid prolonged and repeated contact. Access to storage tanks, confined Spaces or other high concentration areas should be monitored.其他保护:

Section 9 Physical and Chemical Properties

Physical Properties:	Liquefied Gas
Color:	Colorless
Odor:	Odorless(pure)
Molecular Weight:	N/A
pH:	N/A
Boiling Point:	No data
Melting/Freezing Point:	No data
Flash point:	No data
Burning point:	No data
Combustion heat:	No data
Volatility:	Gas(under normal temperature and pressure)
Solubility in water	Slightly soluble in water
Relative Density:	No data
Explosion limit(v/v):	PROPYLENE Lower explosion limit 2.0%(V/V); Upper explosion limit 11.7%(V/V) PROPANE Lower explosion limit 2.1%(V/V):Upper explosive limit:9.5%(V/V) DIMETHYL ETHER Lower explosion limit 3%(V/V):Upper explosive limit:17%(V/V)
Vapor pressure:	No data
Relative vapor density:	No data
Critical temperature:	No data
Critical pressure::	No data

Section 10 Stability and Reactivity

Stability: Stable at room temperature.

Conditions to avoid: Heat,high temperature,flames,moist air.

Material to Avoid: Strong oxidizing agents, halogen.

Hazardous Decomposition Products: Carbon oxides.

Hazardous Polymerization: Will not occur.

Section 11 Toxicological information

Acute Oral LD_{50}	No Data
Acute dermal LD_{50}	No Data
Acute inhalation LD_{50}	No Data
Eye Corrosion/irritation	No Data
Skin corrosion/irritation	No Data
Potential health effects	No Data

Carcinogenicity **No Data**
Target Organ Effects **No Data**

Section 12 Ecological Information

Biodegradability: No Data
BOD5 and COD: No Data
Aquatic Toxicity: No Data
Bio-accumulative Potential: No Data

Section 13 Disposal Consideration

Product: Hand over the remaining and unrecycled products to the disposal company. Contact a professional waste disposal license to dispose of the substance.

Contaminated packaging: Contact a licensed professional waste disposal service to dispose of this material.

Section 14 Transport Information

Maritime transport IMDG (2012 edition):
IMDG Class: 2.1
UN Number: 3161
Packaging group:-
Marine pollutant: No
Proper shipping name: LIQUEFIED GAS, FLAMMABLE
Air transport ICAO-TI and IATA-DGR (55TH edition):
ICAO/IATA Class: 2.1
UN/ID Number: 3161
Packaging group:-
Proper shipping name: LIQUEFIED GAS, FLAMMABLE

Section 15 Regulatory Information

CHINA: Safety Regulation for Hazardous Chemicals: The substance is classed as division 2.1 hazardous chemicals according to Classification and labels of dangerous chemical(GB 13690-2009、GB12268-2012).

Section 16 Other Information

This information is compiled based on our knowledge and is intended for health, safety and environmental purposes only. Please do not make this information. For any form of warranty. Please provide necessary training to those who may use, dispose of and need to operate the product safely.

Abbreviation: N/A=Not available or Not applicable

Edit Date: January .10, 2019

Edit Institution: Ningbo Koman's Refrigeration Industry Co.,Ltd.

Update and Revise: the second edition

Edit Standard: global uniform classification and labelling system for chemicals (revision 5, GHS), appendix 4: guidance for the preparation of safety data sheets

The period of validity of the safety data:

The safety data sheet is based on the unified global chemical classification and labelling system, the United Nations proposal about dangerous goods transport, the international maritime dangerous goods regulations, air transport of dangerous goods regulations, the hazardous chemical materials safety management regulations and national standards related to dangerous chemicals management laws, regulations and standards, and these laws, regulations and standards will be regularly updated and change.

The product safety data sheet shall be reviewed and updated before October 30, 2020 in order to make the transported dangerous goods conform to the relevant latest management requirements.