

Safety Data Sheet 50042 / 4594689

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 04/04/2014 Date of issue: 04/04/2014

US Supplier

DRAEGER SAFETY Inc.

Pittsburgh, PA 15275-1057

101 Technology Drive

Version: 1.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

<u>Product Identifier</u> <u>Product Form:</u> Mixture

Product Name: Propane < 1.2% in Balance Air Gas **DRAEGER P/N:** 4594557, 4594624, 4597058

Intended Use of the Product

Calibration of Monitoring or Research Equipment

Name, Address, and Telephone of the Responsible Party

CompanyCalgaz, division of Air Liquide

2700 Post Oak Blvd. Houston, TX 77056

USA

(713) 896-2896 sds@airliquide.com www.us.airliquide.com

Emergency Telephone Number

Emergency number : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US) Compressed gas H280

<u>Label Elements</u> GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H280 - Contains gas under pressure; may explode if heated

Precautionary Statements (GHS-US) : P410+P403 - Protect from sunlight. Store in a well-ventilated place

Other Hazards Not available

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Air	(CAS No) 132259-10-0	98.8 to 100	Not classified
Propane	(CAS No) 74-98-6	< 0.1, 0.1 to 1 or 0.5 to 1.2	Simple Asphy
			Flam. Gas 1, H220
			Compressed gas, H280

More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition. The composition of Air is as follows: 79% Nitrogen and 21% Oxygen.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.

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Inhalation: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. If exposed or concerned: Get

medical advice/attention

Skin Contact: Rinse with plenty of water. Obtain medical attention if irritation develops or persists

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Obtain medical attention.

Ingestion: Ingestion is an unlikely route of exposure for a gas.

Most Important Symptoms and Effects Both Acute and Delayed

General: Compressed gases may create low temperatures when they expand rapidly. Leaks and uses that allow rapid expansion may cause a frostbite hazard.

Inhalation: None expected under normal conditions of use. **Skin Contact:** None expected under normal conditions of use. **Eye Contact:** None expected under normal conditions of use. **Ingestion:** None expected under normal conditions of use.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. In case of fire: keep cylinder cool by spraying with water.

Unsuitable Extinguishing Media: Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable. Contains gas under pressure; may explode if heated.

Explosion Hazard: Cool closed containers exposed to fire with water spray. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity: Contains < 1.2% Propane, a flammable gas and simple asphyxiant.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Do not breathe gas.

Firefighting Instructions: Stop leak if safe to do so. Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Fight fire from safe distance and protected location.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Hazardous Combustion Products: Nitrogen compounds. Carbon oxides (CO, CO₂). Hydrocarbons. Smoke.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe gas. Avoid contact with the skin and the eyes. Keep away from heat, sparks, open flames, hot surfaces. No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE). **Emergency Procedures:** Evacuate unnecessary personnel. Keep upwind.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions

Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Stop leak if safe to do so.

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Methods for Cleaning Up: Stop the source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Risk of explosion if heated under confinement. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Ruptured cylinders may rocket. Do not pressurize, cut, or weld containers.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Use only outdoors or in a well-ventilated area. Do no eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling. Keep at temperatures below 52°C / 125°F.

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Keep/Store away from combustible and reducing. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Keep reduction valves free from grease and oil.

Specific End Use(s)

Calibration of Monitoring or Research Equipment.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Propane (74-98-6)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1800 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	2100 ppm (10% LEL)
Alberta	OEL TWA (ppm)	1000 ppm
British Columbia	OEL TWA (ppm)	1000 ppm
Manitoba	OEL TWA (ppm)	1000 ppm
Newfoundland & Labrador	OEL TWA (ppm)	1000 ppm
Nova Scotia	OEL TWA (ppm)	1000 ppm
Ontario	OEL TWA (ppm)	1000 ppm
Prince Edward Island	OEL TWA (ppm)	1000 ppm
Québec	VEMP (mg/m³)	1800 mg/m³
Québec	VEMP (ppm)	1000 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Oxygen detectors should be used when asphixiating gases may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing. Self-contained breathing apparatus.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

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Respiratory Protection: Use a NIOSH-approved self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Thermal Hazard Protection: If material is cold, wear thermally resistant protective gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties **Physical State** Gas **Appearance** Colorless Odor Odorless **Odor Threshold** Not available Not available рΗ Not available Relative Evaporation Rate (butylacetate=1) **Melting Point** Not available **Freezing Point** Not available Not available **Boiling Point Flash Point** Not available Not available **Auto-ignition Temperature Decomposition Temperature** Not available Flammability (solid, gas) Not available Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Relative Vapor Density at 20 °C Not available

Specific Gravity Not available Solubility Not available Log Pow Not available Log Kow Not available Viscosity, Kinematic Not available Viscosity, Dynamic Not available Explosion Data – Sensitivity to Mechanical Impact : Not available Explosion Data - Sensitivity to Static Discharge Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Contains gas under pressure; may explode if heated. Contains < 1.2% Propane, a flammable gas and simple asphyxiant.

Not available

Stable under recommended handling and storage conditions (see section 7). **Chemical Stability:**

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Incompatible materials. Sparks, heat, open flame and other sources of ignition.

Incompatible Materials: Strong oxidizers. Combustible materials. Can react violently with lithium, neodymium, titanium under the

proper conditions.

Relative Density

Hazardous Decomposition Products: Nitrogen compounds. Carbon oxides (CO, CO₂). Hydrocarbons. Smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified Serious Eve Damage/Irritation: Not classified **Respiratory or Skin Sensitization:** Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available Carcinogenicity: Not classified

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Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: None expected under normal conditions of use. Contains < 1.2% Propane, a flammable gas and

simple asphyxiant.

Symptoms/Injuries After Skin Contact: None expected under normal conditions of use. Symptoms/Injuries After Eye Contact: None expected under normal conditions of use. Symptoms/Injuries After Ingestion: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Propane (74-98-6)	
LC50 Inhalation Rat (mg/l)	658 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability Not available

Bioaccumulative Potential

Propane (74-98-6)	
Log Pow	2.3

Mobility in Soil Not available

Other Adverse Effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Recycle the material as far as possible. Cylinders with undesired residual product may be safely vented outdoors with the proper regulator. For further information refer to section 16.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

14.2 In Accordance with IMDG

Proper Shipping Name : COMPRESSED GAS, N.O.S. (Air, Propane)

Hazard Class : 2.2 Identification Number : UN1956 Label Codes : 2.2 ERG Number : 115

Proper Shipping Name : COMPRESSED GAS, N.O.S. (Air, Propane)

Hazard Class : 2.2
Identification Number : UN1956
Label Codes : 2.2
EmS-No. (Fire) : F-C
EmS-No. (Spillage) S-V

14.3 In Accordance with IATA

Proper Shipping Name : COMPRESSED GAS, N.O.S. (Air, Propane)

Identification Number : UN1956

Hazard Class : 2 Label Codes : 2.2 ERG Code (IATA) : 2L





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14.4 In Accordance with TDG

Proper Shipping Name : COMPRESSED GAS, N.O.S. (Air, Propane)

Hazard Class : 2.2 Identification Number : UN1956 Label Codes : 2.2



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Propane < 1.2% in Balance Air Gas	
SARA Section 311/312 Hazard Classes	Sudden release of pressure hazard
Propane (74-98-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

Propane (74-98-6)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Delaware Accidental Release Prevention Regulations Sufficient Quantities
- U.S. Delaware Accidental Release Prevention Regulations Threshold Quantities
- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Idaho Occupational Exposure Limits TWAs
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 2
- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 2
- U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New Jersey TCPA Extraordinarily Hazardous Substances (EHS)
- U.S. New York Occupational Exposure Limits TWAs
- U.S. Ohio Accidental Release Prevention Threshold Quantities
- U.S. Oregon Permissible Exposure Limits TWAs
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Canadian Regulations

Propane < 1.2% in Balance Air Gas

WHMIS Classification Class A - Compressed Gas



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Air (132259-10-0)		
WHMIS Classification	Class A - Compressed Gas	
Propane (74-98-6)		
Listed on the Canadian DSL (Domestic Substances List) inventory.		
WHMIS Classification	Class A - Compressed Gas	
	Class B Division 1 - Flammable Gas	

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION

Revision date : 04/04/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Compressed gas	Gases under pressure Compressed gas
Flam. Gas 1	Flammable gases Category 1
Simple Asphy	Simple Asphyxiant
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated

Party Responsible for the Preparation of This Document

Calgaz, division of Air Liquide aB&T Phone Number: 713-896-2896

This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this gas mixture. To the best of CALGAZ knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

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