

# MATERIAL SAFETY DATA SHEET

CAL-GAS INC.

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Supercedes: November 1, 2005  
MSDS Number: 0001

Cette fiche signalétique est aussi disponible en français

## 1. PRODUCT INFORMATION

Product identifier: HD-5 PROPANE

Application and Use:

Automotive or space heating fuel

Product Description:

Colourless gases composed mainly of C3 hydrocarbons stored and handled as liquids under pressure

## REGULATORY CLASSIFICATION

### WHMIS:

Class A - Compressed Gas

Class B, Division 1 : Flammable Gases.

### TRANSPORTATION OF DANGEROUS GOODS INFORMATION

Shipping Name: Liquefied Petroleum Gas (Propane) - Odourized

Class: Flammable Gas 2.1 Packing Group: Not applicable

PIN Number: UN1075 Guide Number: 102

Please be aware that other regulations may apply

## 2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a) (I) to (iv) or paragraph 14 (a) of the Hazardous Products Act:

NAME	%	CAS #
ETHANE	0-5 v/v	74-84-0
Propane	90-99 v/v	74-98-6
Propylene	1-10 v/v	115-07-1

## 3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Gas

Vapour Density: 1.52

Boiling Point: -42 deg C

Solubility in water: 0%

Vapour Pressure: 92,000 kPa @ 16 deg C

Density: 0.51 g/cc at 15 deg C

Appearance/odour: Colourless odourless gas, stench to give bitter odour.

## 4. HEALTH HAZARD INFORMATION

### Nature of Hazard

### INHALATION

Low Toxicity.

Causes suffocation (asphyxiant) if allowed to accumulate to concentrations that reduce oxygen below safe breathing levels

### EYE CONTACT

Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite (cold burn)

### SKIN CONTACT

Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite (cold burn)

### INGESTION

Not considered to be a hazard

### OCCUPATIONAL EXPOSURE LIMIT

Manufacturer recommends:

1000 ppm recommended based on composition

## 5. FIRST AID MEASURES

### INHALATION

In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention

### EYE CONTACT

In case of cold burns caused by rapidly expanding gas or vapourizing

### SKIN CONTACT

In case of cold burns caused by rapidly expanding gas or vapourizing

### INGESTION

In case of cold burns caused by rapidly expanding gas or vapourizing liquid, get prompt medical attention

## 6. PREVENTIVE AND CORRECTIVE MEASURES

### PERSONAL PROTECTION:

The Selection of personal protective equipment varies, depending, conditions of use. Gloves and safety glasses should be worn. Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

### ENGINEERING CONTROLS:

The use of mechanical ventilation is recommended whenever this material is used in a confined space to maintain airborne concentrations below recommended occupational exposure limits. Use explosion-proof ventilation equipment.

### HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care. Store in a cool well ventilated place away from incompatible materials. Store and load at normal (up to 38 deg C) temperature and at atmospheric pressure

### LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard. Vapours or dust may be harmful or fatal. Warn occupants of downwind areas. Allow to evaporate. Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.

### WATER SPILL:

Eliminate source of ignition. Vapours or dust may be harmful or fatal. Warn Warn occupants a shipping in downwind area. Allow to evaporate from surface. Consult an expert on disposal of recovered materials. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.

### TELEPHONE NUMBERS:

Emergency response  
ERAP-2-0010-008  
1-800-265-0212  
www.calgasinc.com

### MANUFACTURER/SUPPLIER:

Cal-Gas Inc.  
4255 64 Avenue SE  
Calgary, Alberta  
403-279-7019



BRANCH LOCATIONS: BONNYVILLE, AB; CALGARY, AB; CARLYLE, SK; DAWSON CREEK, BC; EDMONTON, AB; FORT FRANCES, ON; FORT ST JOHN, BC; GOLDEN, BC; HINTON, AB; KAMLOOPS, BC; KELOWNA, BC; KERROBERT, SK; LLOYDMINSTER, AB; MEDICINE HAT, AB; PEACE RIVER, AB; PROVOST, AB; RED EARTH, AB; RIMBEY, AB; SLAVE LAKE, AB; CASTLEGAR, BC; THUNDER BAY, ON; WHITE RIVER, ON; WINNIPEG, MB

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## 7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: -103 deg C COC 92

Autoignition: 432 deg C Flammable Limits: LEL: 2.4% UEL: 9.5%

### GENERAL HAZARDS:

Extremely flammable: material will readily ignite at normal temperatures.

Flammable Gas: may readily form flammable mixture at or above the flash point.

Toxic Gases will form upon combustion

Static Discharge: material may accumulate static charges which may cause an electrical fire.

Auto-refrigeration; drains may become plugged and valves may become inoperable because of the formation of ice due to expanding vapours or vapourizing liquids.

### FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited, use water spray to disperse the vapour. Either allow fire to burn out under controlled conditions or extinguish with foam or dry chemical. Try to cover the liquid spills with foam. Respiratory and eye protection required for fire fighting personnel. A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required

### HAZARDOUS COMBUSTION PRODUCTS;

Smoke, carbon monoxide, carbon dioxide

## 8. REACTIVITY DATA

### STABILITY:

This product is stable. Hazardous polymerization will not occur.

### INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong Oxidizing agents.

## 9. NOTES

### CAUTION

CAUTION: "The information contained herein relates only to this product or material and may not be valid when used in combination with any other products or material or in any process. If the product is not to be used for a purpose or under conditions which are normal or reasonably foreseeable, this information cannot be relied upon as complete or applicable. For greater certainty, uses other than those described in Section 1 must be reviewed with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Cal-Gas Inc. customers and their employees and agents only. Any further distribution of this MSDS by Cal-Gas Inc. customers is prohibited without the written consent of Cal-Gas Inc."

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