

## SECTION: 1. Product and company identification

### 1.1. Product identifier

Product form : Substance  
 Trade name : Liquefied Petroleum Gas  
 CAS-No. : 74-98-6  
 Formula (Override) : C3H8  
 Other means of identification : Trade name: Propane Care40 R290, Synonyms: Dimethylmethane

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial and professional use  
 Fuels

### 1.3. Details of the supplier of the safety data sheet

Keen Compressed Gas Co.  
 4063 New Castle Avenue  
 New Castle, DE 19702

Keen Compressed Gas Co. 302-594-4545

For additional product information contact your local customer service.

### 1.4. Emergency telephone number

**Emergency number** Onsite Emergency: 302-594-4545

CHEMTREC, 24 hr/day 7 days/week  
 — Within USA: 1-800-424-9300, Outside USA: 001-703-527-3887  
 (collect calls accepted, Contract 17729)

## SECTION 2: Hazard identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Flam. Gas 1A H220  
 Press. Gas (Liq.) H280  
 Simple Asphy. SIAS

### 2.2. Label elements GHS

#### US labelling

Hazard pictograms (GHS US) :



GHS02

GHS04

Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H220 - EXTREMELY FLAMMABLE GAS  
 H280 - CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED  
 OSHA-H01 - MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION  
 CGA-HG01 - MAY CAUSE FROSTBITE.  
 CGA-HG04 - MAY FORM EXPLOSIVE MIXTURES WITH AIR

Precautionary statements (GHS US) :

P202 - Do not handle until all safety precautions have been read and understood.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P262 - Do not get in eyes, on skin, or on clothing.  
 P271+P403 - Use and store only outdoors or in a well-ventilated place  
 P280 - Wear protective gloves, protective clothing, eye protection, and face protection.

# Propane

## Safety Data Sheet

This SDS conforms to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.  
Issue date: 02/23/2015 Revision date: 03/11/2026 Supersedes: 03/25/2022 SDS US Version: 4.0

P377 - LEAKING GAS FIRE: Do not extinguish, unless leak can be stopped safely.  
P381 - In case of leakage, eliminate all ignition sources if safe to do so.  
P304 - IF INHALED:  
P340 - Remove person to fresh air and keep comfortable for breathing.  
P313 - Get medical advice or attention.  
P302 - IF ON SKIN:  
P336 - Thaw frosted parts with lukewarm water. Do not rub affected area.  
P315 - Get immediate medical advice or attention.  
CGA-PG05 - Use a back flow preventive device in the piping.  
CGA-PG12 - Do not open valve until connected to equipment prepared for use.  
CGA-PG10 - Use only with equipment rated for cylinder pressure.  
CGA-PG06 - Close valve after each use and when empty.  
CGA-PG11 - Never put cylinders into unventilated areas of passenger vehicles.  
CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F).

### 2.3. Other hazards

Other hazards which do not result in classification : Contact with liquid may cause cold burns/frostbite.

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
Propane (Main constituent)	(CAS-No.) 74-98-6	100

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a physician.

First-aid measures after skin contact : The liquid may cause frostbite. For exposure to liquid, immediately warm frostbite area with warm water not to exceed 105°F (41°C). Water temperature should be tolerable to normal skin. Maintain skin warming for at least 15 minutes or until normal coloring and sensation have returned to the affected area. In case of massive exposure, remove clothing while showering with warm water. Seek medical evaluation and treatment as soon as possible.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately. Get immediate medical attention.

First-aid measures after ingestion : Ingestion is not considered a potential route of exposure.

### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

### 4.3. Indication of any immediate medical attention and special treatment needed

None.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide, dry chemical powder, water spray, fog.

# Propane

**Safety Data Sheet** This SDS conforms to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Issue date: 02/23/2015 Revision date: 03/11/2026 Supersedes: 03/25/2022 SDS US Version: 4.0

## 5.2. Special hazards arising from the substance or mixture

Fire hazard	: EXTREMELY FLAMMABLE GAS. If venting or leaking gas catches fire, do not extinguish flames. Flammable vapors may spread from leak, creating an explosive reignition hazard. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product handling point. Explosive atmospheres may linger. Before entering an area, especially a confined area, check the atmosphere with an appropriate device.
Explosion hazard	: EXTREMELY FLAMMABLE GAS. Forms explosive mixtures with air and oxidizing agents.
Reactivity	: No reactivity hazard other than the effects described in sub-sections below.

## 5.3. Advice for firefighters

Firefighting instructions	: Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with OSHA 29 CFR 1910.156 and applicable standards under 29 CFR 1910 Subpart L—Fire Protection.
Protection during firefighting	: Compressed gas: asphyxiant. Suffocation hazard by lack of oxygen.
Special protective equipment for fire fighters	: Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.
Specific methods	: Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas containers to rupture. Cool endangered containers with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems.  Stop flow of product if safe to do so.  Use water spray or fog to knock down fire fumes if possible.
Other information	: Containers are equipped with a pressure relief device. (Exceptions may exist where authorized by TC.).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Wear self-contained breathing apparatus when entering area unless atmosphere is proven to be safe. Evacuate area. Ensure adequate air ventilation. Stop leak if safe to do so.
------------------	--

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Try to stop release.

### 6.3. Methods and material for containment and cleaning up

No additional information available

### 6.4. Reference to other sections

See also sections 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Use only explosion-proof equipment.

Wear leather safety gloves and safety shoes when handling cylinders. Protect containers from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Never insert an object (e.g. wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Slowly open the valve. If the valve is hard to open, discontinue use and contact your supplier. Close the container valve after each use; keep closed even when empty. Never apply flame or localized heat directly to any part of the container. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents. For other precautions in using this product, see section 16.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store only where temperature will not exceed 125°F (52°C). Post "No Smoking/No Open Flames" signs in storage and use areas. There must be no sources of ignition. Separate packages and protect against potential fire and/or explosion damage following appropriate codes and requirements (e.g. NFPA 30, NFPA 55, NFPA 70, and/or NFPA 221 in the U.S.) or according to requirements determined by the Authority Having Jurisdiction (AHJ). Always secure containers upright to keep them from falling or being knocked over. Install valve protection cap, if provided, firmly in place by hand when the container is not in use. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods. For other precautions in using this product, see section 16.

**OTHER PRECAUTIONS FOR HANDLING, STORAGE, AND USE:** When handling product under pressure, use piping and equipment adequately designed to withstand the pressures to be encountered. Never work on a pressurized system. Use a back flow preventive device in the piping. Gases can cause rapid suffocation because of oxygen deficiency; store and use with adequate ventilation. If a leak occurs, close the container valve and blow down the system in a safe and environmentally correct manner in compliance with all international, federal/national, state/provincial, and local laws; then repair the leak. Never place a container where it may become part of an electrical circuit.

### 7.3. Specific end use(s)

None.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Propane (74-98-6)		
USA OSHA	OSHA PEL TWA	1800 mg/m <sup>3</sup>
USA OSHA	OSHA PEL TWA	1000 ppm
USA IDLH	IDLH	2100 ppm (10% LEL)
ACGIH	Not established	

### 8.2. Exposure controls

Appropriate engineering controls

: An explosion-proof local exhaust system or a mechanical system is acceptable if it can prevent oxygen deficiency and keep hazardous fumes and gases below all applicable exposure limits in the worker's breathing area. During welding, ensure that there is adequate ventilation to keep worker exposure below applicable limits for fumes, gases, and other by-products of welding. Do not breathe fumes or gases. Short-term overexposure to fumes may cause dizziness, nausea, and dryness or irritation of the nose, throat, and eyes, or may cause other similar discomfort.

Hand protection

: Select hand protection in accordance with OSHA 29 CFR 1910.138.

Eye protection

: Wear safety glasses when handling cylinders; vapor-proof goggles and a face shield during cylinder changeout or whenever contact with product is possible. Select eye protection in accordance with OSHA 29 CFR 1910.133.

Skin and body protection	: As needed for welding, wear hand, head, and body protection to help prevent injury from radiation and sparks. (See ANSI Z49.1.) At a minimum, this includes welder's gloves and protective goggles, and may include arm protectors, aprons, hats, and shoulder protection as well as substantial clothing. Wear insulated neoprene gloves for cylinder handling; welding gloves for welding. Metatarsal shoes for cylinder handling. Select in accordance with OSHA 29CFR 1910.132, 1910.136, and 1910.138. See section 16 for requirements when using carbon dioxide and carbon dioxide mixtures in welding and cutting.
Respiratory protection	: When workplace conditions warrant respirator use, follow a respiratory protection program that meets or exceeds the requirements of the appropriate Health and Safety Regulations. Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).
Thermal hazard protection	: Wear cold insulating gloves when transfilling or breaking transfer connections.
Environmental exposure controls	: Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.
Other information	: Consider the use of flame resistant anti-static safety clothing.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Colourless gas.
Molecular mass	: 44.1 g/mol
Colour	: Colourless.
Odour	: Stenchant often added. Sweetish. Poor warning properties at low concentrations.
Odour threshold	: No data available
pH	: Not applicable.
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: Not applicable.
Melting point	: No data available
Freezing point	: -187.69 °C (-305.8°F)
Boiling point	: -42.1 °C (-44.32°F)
Flash point	: -104.4 °C (-155.2°F) TCC
Critical temperature	: 96.8 °C (206°F)
Auto-ignition temperature	: 450 °C (842°F)
Decomposition temperature	: No data available
Flammability	: 2.1 – 9.5 Vol-%
Vapour pressure	: 8.58 bar (109.73 psig)
Relative vapour density at 20°C	: No data available
Relative density	: 0.58
Density	: 0.493 g/cm <sup>3</sup> (at 25 °C)
Relative gas density	: 1.5
Solubility	: Water: 75 mg/l at 20 °C
Partition coefficient n-octanol/water (Log Pow)	: Not applicable.
Partition coefficient n-octanol/water (Log Kow)	: Not applicable.
Viscosity, kinematic	: Not applicable.
Viscosity, dynamic	: Not applicable.
Explosive properties	: Not applicable.
Oxidizing properties	: None.
Explosive limits	: No data available

### 9.2. Other information

Gas group : Press. Gas (Liq.)  
Additional information : Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Can form explosive mixture with air. May react violently with oxidants.

### 10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

### 10.5. Incompatible materials

Air, Oxidizer. Chlorine dioxide.

### 10.6. Hazardous decomposition products

Thermal decomposition or burning may produce carbon monoxide, carbon dioxide, and hydrogen. The welding and cutting process may form reaction products such as carbon monoxide and carbon dioxide. Other decomposition products of normal operation originate from the volatilization, reaction, or oxidation of the material being worked.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Propane ( f )74-98-6

LC50 Inhalation - Rat [ppm]	> 800000 ppm (Exposure time: 15 min Source: ECHA_API)
-----------------------------	---

Skin corrosion/irritation : Not classified  
pH: Not applicable.  
Serious eye damage/irritation : Not classified  
pH: Not applicable.  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not applicable

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : No ecological damage caused by this product.

### 12.2. Persistence and degradability

Propane (74-98-6)	
Persistence and degradability	The substance is readily biodegradable. Unlikely to persist.

### 12.3. Bioaccumulative potential

Propane (74-98-6)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable.
Partition coefficient n-octanol/water (Log Kow)	Not applicable.
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). See section 9.

### 12.4. Mobility in soil

Propane (74-98-6)	
Mobility in soil	No data available.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely.

### 12.5. Other adverse effects

Effect on the ozone layer	: None.
Effect on global warming	: No known effects from this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.
--	--

## SECTION 14: Transport information

In accordance with DOT	
Transport document description (DOT)	: UN1978 Propane (see also Petroleum gases, liquefied [UN1075]), 2.1
UN-No. (DOT)	: UN1978
Proper Shipping Name (DOT)	: Propane see also Petroleum gases, liquefied [UN1075]
Transport hazard class(es) (DOT)	: 2.1
Hazard labels (DOT)	: 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102)	: 19 - For domestic transportation only, the identification number UN1075 may be used in place of the identification number specified in column (4) of the 172.101 table. The identification number used must be consistent on package markings, shipping papers and emergency response information. T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of 173.313 of this subchapter.
---	--

### Additional information

Emergency Response Guide (ERG) Number	: 115 (UN1075)
Other information	: No supplementary information available.
Special transport precautions	: Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: -Ensure there is adequate ventilation. - Ensure that containers are firmly secured. - Ensure valve is closed and not leaking. - Ensure valve outlet cap nut or plug (where provided) is correctly fitted. - Ensure valve protection device (where provided) is correctly fitted.

#### Transport by sea

UN-No. (IMDG) : 1978  
 Proper Shipping Name (IMDG) : PROPANE  
 Transport hazard class(es) (IMDG) : 2.1  
 EmS-No. (1) : F-D  
 EmS-No. (2) : S-U

Other information : No supplementary information available.

#### Air transport

UN-No. (IATA) : 1978  
 Proper Shipping Name (IATA) : PROPANE  
 Transport hazard class(es) (IATA) : 2.1

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Propane	CAS-No. 74-98-6	100%
---------	-----------------	------

#### 15.2. International regulations

##### CANADA

**Liquefied Petroleum Gas (74-98-6)** Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

###### Liquefied Petroleum Gas (74-98-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 15.2.2. National regulations

##### Liquefied Petroleum Gas (74-98-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
 Listed on NZIoC (New Zealand Inventory of Chemicals)  
 Listed on the Japanese ISHL (Industrial Safety and Health Law)  
 Listed on INSQ (Mexican National Inventory of Chemical Substances)  
 Listed on the TCSI (Taiwan Chemical Substance Inventory)  
 Listed on the NCI (Vietnam - National Chemical Inventory)  
 Listed on Thailand Existing Chemicals Inventory (DIW)

#### 15.3. US State regulations

##### Liquefied Petroleum Gas(74-98-6)

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No

<b>Liquefied Petroleum Gas(74-98-6)</b>	
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U - New Jersey - Right to Know Hazardous Substance List U - Pennsylvania - RTK (Right to Know) List U - Massachusetts - Right To Know List

# Propane

## Safety Data Sheet

This SDS conforms to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.  
 Issue date: 02/23/2015 Revision date: 03/11/2026 Supersedes: 03/25/2022 SDS US Version: 4.0

### SECTION 16: Other information

#### Other information

When using this product in welding and cutting, read and understand the manufacturer's instructions and the precautionary label on the product. For a detailed treatment, get ANSI Z49.1, Safety in Welding, Cutting, and Allied Processes, published by the American Welding Society (AWS), [www.aws.org](http://www.aws.org). Order AWS documents from Global Engineering Documents, [global.ihc.com](http://global.ihc.com). Arcs and sparks can ignite combustible materials. Prevent fires. Refer to NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hotwork. Do not strike an arc on the container. The defect produced by an arc burn may lead to container rupture.

Fumes and gases produced during welding and cutting processes can be dangerous to your health and may cause serious lung disease. KEEP YOUR HEAD OUT OF FUMES. DO NOT BREATHE FUMES AND GASES. Use enough ventilation, local exhaust, or both to keep fumes and gases from your breathing zone and the general area. Short-term overexposure to fumes may cause dizziness, nausea, and dryness or irritation of the nose, throat, and eyes; or may cause other similar discomfort. Contaminants in the air may add to the hazard of fumes and gases.

When you mix two or more chemicals, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Before using any plastics, confirm their compatibility with this product.

Keen asks users of this product to study this SDS and become aware of the product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

The opinions expressed herein are those of qualified experts within Keen. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use are not within the control of Keen, it is the user's obligation to determine the conditions of safe use of the product. SDSs are furnished on sale or delivery by Keen or the independent distributors and suppliers who package and sell our products. To obtain current SDSs for these products, contact your sales representative, local distributor, or supplier, or download from [www.keengas.com](http://www.keengas.com)

Revision date 03/11/2026

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA instability : 0 - Material that in themselves are normally stable, even under fire conditions.

