

QUALITY EXTRACTIONS GROUP, LLC

Safety Data Sheet Propane

SECTION 1: Identification

1.1 Product identifier

Product name Propane

Brand QEG - Diversified

1.2 Other means of identification

Propane, liquefied; C3H8, odorless,

1.3 Recommended use of the chemical and restrictions on use

For use in R&D, as a botanical extraction solvent, in specialty fuels

1.4 Supplier's details

Name Quality Extractions Group, LLC

Address 2533 Tracy Road

Northwood OH 43619

USA

Telephone 567-698-9802

email info@qualityextractions.com

1.5 Emergency phone number(s)

ChemTrec 800-424-9300

SECTION 2: Hazard identification

General hazard statement

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Version: 1.0, Date of issue: 2020-10-31, p. 1 of 8

- Flammable gases, Cat. 1
- Gases under pressure, liquefied gas

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H220 Extremely flammable gas

H280 Contains gas under pressure; may explode if heated

Precautionary statement(s)

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.

P403 Store in a well-ventilated place.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

2.3 Other hazards which do not result in classification

Liquid can cause burns similar to frostbite.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

1. Propane, liquid

 Concentration
 99.5 % (weight)

 EC no.
 200-827-9

 CAS no.
 74-98-6

 Index no.
 601-003-00-5

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If unconscious, place in recovery position, on back maintaining an open

airway. Lossen all tight clothing: collar, tie, belt or waistband

In case of skin contact Wash with plenty of water for at least 15 minutes. Call a poison center or

doctor if irritation develops or persists. Take off contaminated clothing and

wash it before reuse.

Version: 1.0, Date of issue: 2020-10-31, p. 2 of 8

Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

In case of eye contact Rinse cautiously with water for at least 15 minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. If eye irritation persists: Get

medical attention/advice.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or

hazy vision.

If swallowed Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Get

medical attention if adverse health effects persist or are severe. Ingestion of

liquid can

cause burns similar to frostbite. If frostbite occurs, get medical attention.

Never give

anything by mouth to an unconscious person. If unconscious, place in

recovery position

and get medical attention immediately. Maintain an open airway. Loosen tight

clothing

such as a collar, tie, belt or waistband. As this product rapidly becomes a

gas when

released, refer to the inhalation section

4.2 Most important symptoms/effects, acute and delayed

Eye contact: Liquid can cause burns similar to frostbite

Skin contact: Skin contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

Unsuitable: None known

5.2 Specific hazards arising from the chemical

Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion.

5.3 Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.3 Methods and materials for containment and cleaning up

Small Spill: Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large Spill: Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposa

Reference to other sections

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use

Version: 1.0, Date of issue: 2020-10-31, p. 4 of 8

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls 8.2

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eve/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

No data available

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.) Clear Liquid Odor None

Odor threshold Not available.

Not available. Melting point/freezing point Not available.

Initial boiling point and boiling range Not available. -104°C (-155.2°F) Flash point Evaporation rate Not available.

Flammability (solid, gas) Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static

discharge and oxidizing materials

Upper/lower flammability limits Lower: 1.8% Upper: 8.4% Vapor pressure 109 PSI Vapor density 1.06

Relative density Not applicable. Water: 0.0244 g/l Solubility(ies) 1.09

Partition coefficient: n-octanol/water

Auto-ignition temperature 287°C (548.6°F)

Decomposition temperature

Viscosity

Not available.

Explosive properties

Not available.

Oxidizing properties

Not available.

Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Skin corrosion/irritation

Skin contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite

Serious eye damage/irritation

Liquid can cause burns similar to frostbite.

Respiratory or skin sensitization

Skin contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

Germ cell mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Summary of evaluation of the CMR properties

No known critical hazards.

STOT-single exposure

Not available.

STOT-repeated exposure

Not available.

Aspiration hazard

Not available.

SECTION 12: Ecological information

Toxicity

No data available on product

Persistence and degradability

No data available on product

Mobility in soil

No data available

SECTION 13: Disposal considerations

Disposal of the product

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

SECTION 14: Transport information

DOT (US)

UN Number: 1978

Class: 2.1 Packing Group: --

Proper Shipping Name: PROPANE Reportable quantity (RQ): Yes

Marine pollutant: No

Poison inhalation hazard: No

IMDG

UN Number: 1978

Class: 2.1

Packing Group: --

Proper Shipping Name: PROPANE

IATA

UN Number: 1978

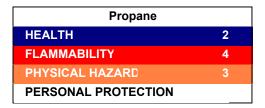
Class: 2.1

Packing Group: --

Proper Shipping Name: PROPANE

SECTION 15: Regulatory information

HMIS Rating



NFPA Rating



SECTION 16: Other information

10/31/2020

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Quality Extraction Group, LLC be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Quality Extraction Group, LLC has been advised of the possibility of such damages.