Safety Data Sheet
acc. to OSHA GHS (29 CFR 1910.1200)

Printing date: 01/26/2016 Revision: 01/26/2016

1 Identification

· **Product identifier**

· **Trade name: Harris Propane**

· **Other means of identification:** No other identifiers

· **Recommended use and restriction on use**
· **Recommended use:** Fuel
· **Restrictions on use:** No relevant information available.

· **Manufacturer/Importer/Supplier/Distributor information**
· **Manufacturer/Supplier:**
Harris Products Group
4501 Quality Place
Mason, Ohio 45040 US
513-754-2000

· **Safety Data Sheet Questions:** salesinfo@jwharris.com
· **Arc Welding Safety Information:** www.lincolnelectric.com/safety

· **24-Hour Emergency Response Telephone Numbers:**
USA/Canada/Mexico: +1 (888) 609-1762
Americas/Europe: +1 (216) 383-8962
Asia Pacific: +1 (216) 383-8966
Middle East/Africa: +1 (216) 383-8969

· **3E Company Access Code:** 333988

2 Hazard(s) identification

Classified according to the criteria of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

· **Classification of the substance or mixture**


GHS02 Flame

Flam. Gas 1 H220 Extremely flammable gas.


GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.

Simple Asphyxiant May displace oxygen and cause rapid suffocation.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms:**

GHS02 GHS04

· **Signal word:** Danger

· **Hazard-determining components of labeling:**
propane
ethane
propene
butane

· **Hazard statements:**
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

· **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.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

74-98-6	propane	87.5-100%
74-84-0	ethane	0-7%
115-07-1	propene	0-5%
106-97-8	butane	0-2.5%

· **Additional information:**
For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.

· **Notable Trace Components (≤ 0,1% w/w)**

75-08-1	ethanethiol

4 First-aid measures

· **Description of first aid measures**
· **General information:** Take affected persons out into the fresh air.
· **After inhalation:**
Supply fresh air.
Provide oxygen treatment if affected person has difficulty breathing.
Seek medical treatment in case of complaints.

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· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
In cases of frostbite, rinse with plenty of water. Do not remove clothing.
If skin irritation continues, consult a doctor.
· **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Unlikely route of exposure.
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
· **Most important symptoms and effects, both acute and delayed:**
Headache
Coughing
Nausea
Dizziness
· **Danger:**
Vapours may cause drowsiness and dizziness.
May be harmful if inhaled.
May displace oxygen and cause rapid suffocation.
· **Indication of any immediate medical attention and special treatment needed:**
If necessary oxygen respiration treatment.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Water fog / haze
Foam
Fire-extinguishing powder
Carbon dioxide
· **For safety reasons unsuitable extinguishing agents:** Water stream.
· **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
· **Advice for firefighters**
· **Special fire fighting procedures:**
Use standard firefighting procedures and consider the hazards of other involved materials.
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
· **Additional information:**
Cool endangered receptacles with water fog.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures:**
Use respiratory protective device against the effects of fumes/dust/aerosol.

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Ensure adequate ventilation.
Use personal protective equipment as required.
Remove persons from danger area.
· **Environmental precautions:** Report spills to authorities as required.
· **Methods and material for containment and cleaning up:**
Allow to evaporate.
Absorb liquid components with liquid-binding material.
Send for recovery or disposal in suitable receptacles.
Used rags or other cleaning materials should be soaked with water and placed in a sealed container.
· **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling**
· **Precautions for safe handling:**
Use only in well ventilated areas.
Avoid contact with the eyes and skin.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Contains gas under pressure; may explode if heated.
Flammable gas-air mixtures may be formed in empty containers/receptacles.

· **Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurized containers.
Avoid storage near extreme heat, ignition sources or open flame.
· **Information about storage in one common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:**
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
· **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

· **Control parameters**
· **Exposure Guidelines:**
Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) are values published by the American Conference of Government Industrial Hygienists (ACGIH). ACGIH Statement of Positions Regarding the TLVs® and BEIs® states that the TLV-TWA should be used as a guide in the control of health hazards and should not be used to indicate a fine line between safe and dangerous exposures. See Sections 2, 3, 8, 10, and 11 for information on potential fume constituents of health interest. Threshold Limit Values are figures published by the American Conference of Government Industrial Hygienists.

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· **Components with limit values that require monitoring at the workplace:**

74-98-6 propane	
PEL (USA)	Long-term value: 1800 mg/m³, 1000 ppm
REL (USA)	Long-term value: 1800 mg/m³, 1000 ppm
TLV (USA)	refer to Appendix F inTLVs and BEIs book
EL (Canada)	Long-term value: 1000 ppm
EV (Canada)	Long-term value: 1000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm
74-84-0 ethane	
TLV (USA)	Refer to Appendix F in TLVs and BEIs book
EL (Canada)	Long-term value: 1000 ppm
EV (Canada)	Long-term value: 1.000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm
115-07-1 propene	
TLV (USA)	Long-term value: 860 mg/m³, 500 ppm
EL (Canada)	Long-term value: 500 ppm
EV (Canada)	Long-term value: 500 ppm
LMPE (Mexico)	Long-term value: 500 ppm A4
106-97-8 butane	
REL (USA)	Long-term value: 1900 mg/m³, 800 ppm
TLV (USA)	Short-term value: 2370 mg/m³, 1000 ppm
EL (Canada)	Short-term value: 750 ppm Long-term value: 600 ppm
EV (Canada)	Long-term value: 800 ppm
LMPE (Mexico)	Long-term value: 1000 ppm

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Use only in well ventilated areas.
· **Engineering controls:** No relevant information available.
· **Breathing equipment:**
Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.

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· **Protection of hands:**

Protective gloves

Wear protective gloves to handle contents of damaged or leaking units.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**

Safety glasses

· **Body protection:** Protective work clothing
· **Limitation and supervision of exposure into the environment** No relevant information available.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **Appearance:**	
Form:	Liquefied gas
Color:	Colorless
· **Odor:**	Hydrocarbon.
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Melting point/Melting range:**	-188 °C (-306 °F)
· **Boiling point/Boiling range:**	-42 °C (-44 °F)
· **Flash point:**	-104 °C (-155 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Auto-ignition temperature:**	432 °C (810 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not self-igniting.
· **Danger of explosion:**	Not determined.
· **Explosion limits**	
Lower:	2.15 Vol %
Upper:	9.6 Vol %
· **Oxidizing properties:**	Non-oxidizing.
· **Vapor pressure at 21 °C (70 °F):**	127 psig
· **Density:**	Not determined.
· **Relative density:**	0.504 (liquid)/ 1.5 (vapor)
· **Vapor density:**	Not determined.

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· **Evaporation rate:**	Not applicable.
· **Solubility in / Miscibility with Water:**	Slightly soluble.
· **Partition coefficient (n-octanol/water):**	1.77
· **Viscosity**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Other information**	No relevant information available.

10 Stability and reactivity

· **Reactivity:** No relevant information available.
· **Chemical stability:**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Danger of receptacles bursting because of high vapor pressure if heated.
· **Possibility of hazardous reactions:**
Reacts with strong oxidizing agents.
Reacts with strong acids and alkali.
· **Conditions to avoid:** Excessive heat.
· **Incompatible materials:** Oxidizers
· **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Hydrocarbons

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **LD/LC50 values that are relevant for classification:** None.
· **Primary irritant effect:**
· **On the skin:** Contact with rapidly expanding gas may cause burns or frostbite.
· **On the eye:** Heat rays (infrared radiation) from flame or hot metal can injure eyes.
· **Sensitization:** No sensitizing effects known.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer):**
None of the ingredients are listed.

· **NTP (National Toxicology Program):**
None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**
None of the ingredients are listed.

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· **Probable route(s) of exposure:**
Inhalation.
Eye contact.
Skin contact.
· **Acute effects (acute toxicity, irritation and corrosivity):**
Vapors have narcotic effect.
May displace oxygen and cause rapid suffocation.
· **Repeated dose toxicity:** From product as supplied: None.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
· **Carcinogenicity:** Based on available data, the classification criteria are not met.
· **Reproductive toxicity:** Based on available data, the classification criteria are not met.
· **STOT-single exposure:** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
· **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity** No relevant information available.
· **Persistence and degradability** The product is partially biodegradable. Significant residuals remain.
· **Bioaccumulative potential:** No relevant information available.
· **Mobility in soil:** No relevant information available.
· **Additional ecological information**
· **General notes:** Avoid release to the environment.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects:** No relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Contact waste processors for recycling information.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**
· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· **UN-Number**
· **DOT, ADR, IMDG, IATA** UN1075

· **UN proper shipping name**
· **DOT, IATA** Petroleum gases, liquefied
· **ADR** 1075 PETROLEUM GASES, LIQUEFIED
· **IMDG** PETROLEUM GASES, LIQUEFIED

· **Transport hazard class(es)**

· **DOT**

· **Class** 2 Gases
· **Label** 2.1

· **ADR**

· **Class** 2 1F Gases
· **Label** 2.1

· **IMDG, IATA**

· **Class** 2 Gases
· **Label** 2.1

· **Packing group** This UN-number is not assigned a packing group.

· **Environmental hazards**
· **Marine pollutant:** No

· **Special precautions for user** Warning: Gases
· **Danger code (Kemler):** 23
· **EMS Number:** F-D,S-U

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **US Federal Regulations**

None of the ingredients are listed.

· **SARA**

· **Section 313 (TRI reporting)**

115-07-1	propene

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **CERCLA Hazardous Substance List (40 CFR 302.4):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**
None present or none present in regulated quantities.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **State Right to Know Listings**

· **US. New Jersey Worker and Community Right-to-Know Act**

propene
propane
butane
ethanethiol

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· **Canada**
· **Canadian substance listings**

· **Canadian Domestic Substances List (DSL):**
All ingredients are listed.

· **Canada Non-Domestic Substances List (NDSL)**
None of the ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%):**
None of the ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%):**
None of the ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

· **Date of preparation / last revision** 01/26/2016 / -

· **Abbreviations and acronyms:**
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
Flam. Gas 1: Flammable gases, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas

· **Sources**
Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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· **Disclaimer:**
We urge each end user and recipient of this SDS to study it carefully. If necessary consult an industrial hygienist or other expert to understand this information and safeguard the environment and protect workers from potential hazards associated with the handling or use of this product.

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Harris Products Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for use, handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.