

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name VICTOR PREMIUM HAND TORCH FUEL

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

Not applicable

1.3 Details of the supplier of the safety data sheet

Supplier VICTOR

Street address 2800 Airport Road
76207 Denton
United States

Telephone 940-381-1323

Emergency phone number 940-566-2000

1.4 Emergency telephone number

Not applicable

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008, Annex VI

Classification Flammable gases, hazard category 1
Gases under pressure, Compressed gas

Hazard statements H220, H280

2.2 Label elements

GHS labeling of the substance (in accordance with Regulation (EC) No 1272/2008, Annex VI)

Pictogram



Signal word Danger

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



Hazard statements

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.

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

2.3 Other hazards

Not applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical name	CAS No. EC No.	Concentration	Classification	R-phrase H-phrase
propene	115-07-1 204-062-1	>99%	F+ -	R12 -
propane	74-98-6 200-827-9	<0,5%	F+ -	R12 -

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

P336 Thaw frosted parts with lukewarm water. Do not rub affected area. P315 Get immediate medical advice/attention. Rapid evaporation of the liquid may cause frostbite. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing.

Inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen.

Skin contact

Remove contaminated clothing and shoes. Wash off with soap and plenty of water. Wash frostbitten areas with plenty of water. Do not remove clothing. Avoid skin contact with leaking liquid (danger of frostbite).

Eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Information for doctors

Rapid evaporation of the liquid may cause frostbite.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable

4.3 Indication of any immediate medical attention and special treatment needed

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



Not applicable

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media use dry chemical, CO₂, water spray or "alcohol" foam

5.2 Special hazards arising from the substance or mixture

Not applicable

5.3 Advice for firefighters

Special protective equipment for fire-fighters Wear full firefighting turn-out gear (full bunker gear), and respiratory protection (SCBA).

Other

Additional information in case of fire P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 Eliminate all ignition sources if safe to do so. In case of fire, stop leak if safe to do so.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. For effective first-aid, special training / education is needed. Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Prevent further leakage or spillage. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

6.3 Methods and material for containment and cleaning up

P376 Stop leak if safe to do so. Ventilate well, stop flow of gas or liquid if possible. Immediately contact emergency personnel.

6.4 Reference to other sections

Not applicable

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Preventive handling precautions Keep away from open flames, hot surfaces and sources of ignition. Wear personal protective equipment.

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



General hygiene Handle in accordance with good industrial hygiene and safety practice for diagnostics.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with the particular national regulations. Keep containers tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

Not applicable

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure limits OSHA PEL (ppm): Propane = 1000 ACGIH TLV (ppm): Propylene = 500

8.2 Exposure controls

Technical precaution measures Ensure adequate ventilation, especially in confined areas. Provide adequate ventilation. Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors.

Eye / face protection safety glasses with side-shields

Safety gloves Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Thermal hazards Thermal hazards Rapid evaporation of the liquid may cause frostbite.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Colorless liquidified gas

Appearance, colour Colorless

Appearance, physical state Not applicable

Auto-ignition temperature ° C

Decomposition temperature Not applicable

Evaporation rate Not applicable

Explosive properties Not applicable

Flammability (solid, gas) Extremely flammable gas

Flash point ° C

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



Freezing point	° C
Initial boiling point and boiling range	Not applicable
Melting point / freezing point	Not applicable
Odour	Hydrocarbon or mercaptan if odorized
Odour treshold	Not applicable
Oxidising properties	Not applicable
Partition coefficient: n-octanol / water	1,77
pH value	Not applicable
Physical state	Gas
Relative density	0.52 (liquid)
Solubility	Not applicable
Solubility in water	Slightly soluble in water
Upper / lower flammability or explosive limits	2 - 11 %
Vapour density	1.5 (0 degrees celsius)
Vapour pressure	109.73 PSIG (21 degrees celsius)
Viscosity	Not applicable

9.2 Other information

VOC (weight %) - 100%

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

The product is non-reactive under normal conditions of use, storage, and transport.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Not applicable

10.4 Conditions to avoid

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

strong oxidizing agents 5.51 - May cause combustion and explosion when in contact with acids, halogens, alcohols, amines.

10.6 Hazardous decomposition products

Hydrocarbons carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing.
Skin corrosion / irritation	Rapid evaporation of the liquid may cause frostbite.
Irritation	Not applicable
Corrosive effects	Not applicable
Sensitisation	Not applicable
Mutagenicity	Not applicable
Carcinogenicity	Not applicable
Repeated dose toxicity	Not applicable
Reproductive toxicity	Not applicable
LC50 Inhalation	Propylene: Mouse - 680 mg/l, 2 hours: Rat - 658 mg/l, 4 hours
Toxicity in case of inhalation	Causes headache, drowsiness or other effects to the central nervous system.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic	not water endangering
----------------	-----------------------

12.2 Persistence and degradability

Readily biodegradable

12.3 Bioaccumulative potential

Not inherently biodegradable.

12.4 Mobility in soil

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

Not applicable

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal considerations

Dispose of as hazardous waste in compliance with local and national regulations. Do not expose of any non-empty container. Cylinders should be emptied and returned to a hazardous waste collection point.

Other

Waste code (EWC)

D001: Waste Flammable material with a flash point <140 degrees fahrenheit.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

UN1077

14.2 UN proper shipping name

Name

Propylene

14.3 Transport hazard class(es)

ADR / RID Class

2.1

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SAFETY DATA SHEET

Product Number: 0916-0122, -0122C, 0916-0123, 0916-0130

VICTOR PREMIUM HAND TORCH FUEL



Other

Lake (IMDG)???

Additional information IMDG UN1077: Propylene: Class 2.1: Label 2.1: EmS - F-D, S-U

Flight (DGR)

Additional information IATA (ICAO) UN1077: Propylene: Class 2.1: Label 2.1:

SECTION 15. REGULATORY INFORMATION

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

EU regulations This product is listed on the European Inventory of Existing Commercial Chemical Substances (EINECS)

National regulations CERCLA/SARA Title III SARA 311/312 EPCRA/SARA Title III 313 Toxic Chemicals Clean Air Act (CAA) section 112(r) Australian Inventory of Chemical Substances (AICS) All components of this product are on the Canadian DSL list. China inventory (IECSC): Not determined. Japan: Inventory of Existing and New Chemical Substances (ENCS) Korea: Existing Chemicals List (ECL) New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. On TSCA Inventory

15.2 Chemical safety assessment

Not applicable

SECTION 16. OTHER INFORMATION

Phrase meaning F+ - Extremely flammable
R12 - Extremely flammable.



MATERIAL SAFETY DATA SHEET

Section 1: Product and Company Identification

Product: Map-Pro Premium Hand Torch Fuel Description: Propylene Date Issued: January 31, 2011 Last Revised: December 30, 2013	Company: Victor Equipment Company Address: 2800 Airport Road Denton, TX 76207 Information: 1-940-566-2000 Emergency: CHEMTREC 1-800-424-9300 (US, Canada, Puerto Rico, Virgin Islands) 1-703-527-3887 (Outside Above Area)
--	--

Section 2: Hazardous Ingredients and Exposure Limits

Ingredient	CAS Number	Weight %	OSHA PEL (ppm)	ACGIH TLV (ppm)
Propylene	115-07-1	99.5 – 100	Not Established	500
Propane	74-98-6	0 – 0.5	1000	1000

Section 3: Physical and Chemical Properties

Boiling Point: -54 °F Melting Point: -301 °F Specific Gravity: 0.52 (liquid) Molecular Weight: 42 Appearance: Colorless gas	Vapor Pressure: 109.73 psig @ 70 °F Vapor Density (air=1): 1.5 @ 32 °F Solubility in Water: Slight Percent Volatile by Weight: 100 Odor: Hydrocarbon
--	---

Section 4: Fire and Explosion Data

Flash Point: -162 °F Auto Ignition: 927 °F Lower Explosion Limit: 2.0% by volume in air Upper Explosion Limit: 11.0% by volume in air General Fire Hazards: Liquid releases vapors that readily form a flammable mixture with air. Dangerous fire and explosion hazard when exposed to heat, sparks or flame. Vapors are heavier than air and may travel long distances to a point of ignition. Container may explode in heat or flame. Hazardous Combustion Products: Carbon monoxide, carbon dioxide and various non-combusted hydrocarbons. Extinguishing Media: Dry chemical, foam, carbon dioxide, Halon or water. Unusual Fire Hazards: Use extreme caution when fighting liquefied petroleum gas fires. Heated containers may rupture violently and suddenly without warning due to vessel overpressure (BLEVE-boiling liquid expanding vapor explosions). If safe to do so stop the flow of gas and allow the flame to burn out. Extinguishing the flame before shutting off the supply can cause formation of explosive mixtures. In some cases it may be preferred to allow the flame to continue to burn. Use water to cool equipment, surfaces and containers exposed to fire and excessive heat.
--

MATERIAL SAFETY DATA SHEET

Section 5: Reactivity Data

Chemical Stability: Stable

Hazardous Decomposition Products: Carbon oxides and various hydrocarbons formed when burned.

Incompatibility: Strong oxidizers such as nitrates, perchlorates, chlorine and fluorine.

Hazardous Polymerization: Does not polymerize except under special conditions (extreme temperature, pressure, oxidizers).

Conditions to Avoid: Sources of heat, sparks or flame.

Section 6: Hazards Identification

Overview: This product contains propylene a colorless liquid that rapidly turns into a gas at standard atmospheric temperatures and pressure. Propylene has a slight hydrocarbon odor. In commerce propylene is packaged as a liquified gas under pressure. Propylene is extremely flammable and explosive. At high concentrations it acts as a simple asphixiant by diluting and displacing oxygen, particularly in confined spaces. Direct contact with liquefied product may cause freeze burns and frostbite. Use this product only in well ventilated areas and, where appropriate, proper respiratory protection and personal protective equipment should be worn.

Primary Entry Routes: Inhalation

Target Organs: Respiratory system

Potential Health Effects:

- Inhalation: Product is an anesthetic at high concentrations. Inhalation may cause central nervous system depression producing dizziness, drowsiness, headache, and similar narcotic symptoms. Extremely high concentrations can cause asphyxiation and death by displacing oxygen from the breathing atmosphere.
- Eyes: Vapor is generally non-irritating to the eyes. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frostbite.
- Skin: Vapor is generally non-irritating to the skin. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frostbite.
- Ingestion: Ingestion is not likely.

Medical Conditions Aggravated by Exposure: Chronic diseases or disorders of the respiratory system.

Toxicological Information: Propylene is an anesthetic and is mildly irritating to the mucous membranes. At high concentrations propylene acts as a simple asphixiant without significant potential for systemic toxicity. High concentrations can cause death due to oxygen depletion. Toxicity data can be found in the Registry of Toxic Effects of Chemical Substances available on-line from the National Institute for Occupational Safety and Health (NIOSH).

Carcinogenic Effects: Propylene is not identified as being carcinogenic by the International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP), ACGIH or OSHA.

Section 7: First Aid Measures

Eye Contact: Flush eyes with plenty of water for at least 15 minutes while occasionally lifting the eyelids. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation or redness develops. In case of frostbite, place affected area in warm water or wrap in blankets if warm water is not available. DO NOT USE HOT WATER. Seek immediate medical attention.

Inhalation: Remove to fresh air. Administer oxygen or artificial respiration if necessary. Seek immediate medical attention.

MATERIAL SAFETY DATA SHEET

Ingestion: Risk of ingestion is extremely low. Seek immediate medical attention in cases of ingestion or oral exposure.

Section 8: Personal Protective Equipment

Engineering Controls: Good industrial hygiene practice requires that engineering controls be used where feasible to reduce workplace concentrations of hazardous materials.

Ventilation: Use adequate ventilation to keep gas and vapor concentrations of this product below the occupational exposure and flammability limits, particularly in confined spaces. Use mechanical ventilation that is explosion proof.

Respiratory Protection: Maintain oxygen levels above 19.5% in the workplace. Respirators must be worn if ambient concentrations of contaminants exceed prescribed exposure limits. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134). Select respirator based on its suitability to provide adequate worker protection for given work conditions, level of airborne contamination, and presence of sufficient oxygen. When required, only NIOSH approved respirators should be used.

Protective Clothing: Protective clothing should be worn to prevent skin contact. Protective gloves should be worn as required for welding or burning. Use insulated gloves where there is the possibility of liquid contact.

Eye Protection: Use safety glasses or goggles as required for welding or burning. Use splash-proof goggles or faceshield where there is the possibility of liquid contact.

Section 9: Handling and Storage

Handling Precautions: Keep away from flame, sparks and excessive temperatures. Use only in well-ventilated areas.

Storage Requirements: Store in a cool, dry, well-ventilated area away from sources of ignition, strong oxidizers or other incompatible materials. Post "No Smoking or Open Flame" signs in the storage and use areas. Protect cylinders against physical damage. Do not cut, drill, grind or weld on empty cylinders since they may contain explosive residues. Do not attempt to refill cylinders.

Spill Response Procedures: Evacuate area of all unnecessary personnel. Remove or shut off all sources of ignition. Ventilate the area thoroughly.

Disposal: Waste disposal must be in accordance with appropriate Federal, State and local regulations.

DOT Requirements: Product is classified as a Hazardous Substance under 49 CFR 172.101.

Shipping Name: Propylene

Hazard Class: 2.1 (Flammable Gas)

ID Number: UN 1077

Packing Group: Not Applicable

Marking: Propylene, UN 1077

Label: Flammable Gas

Placard: Flammable Gas / UN1077

Hazardous Substance/RQ: Not Applicable

Shipping Description: Propylene, 2.1 (Flammable Gas), UN 1077

Packaging References: 49 CFR 173.304, 173.306, 173.314 and 173.315

Section 10: Regulatory Information

US Federal Regulations:

- OSHA Hazardous Communication (29 CFR Part 1910.1200): This product is hazardous as defined in OSHA's Hazard Communication standard.
- OSHA Process Safety Management (29 CFR Part 1910.119): This product may be subject to OSHA's Process

MATERIAL SAFETY DATA SHEET

Safety Management of Highly Hazardous Chemicals standard.

- CERCLA Reportable Quantities (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.
- Extremely Hazardous Substances (40 CFR Part 355): This product is not regulated under 40 CFR Part 355.
- SARA 311/312 Hazard Class (40 CFR Part 370): The following hazard categories apply to this product:
 - Acute Health Hazard
 - Fire Hazard
 - Sudden Release of Pressure
- SARA 313 (40 CFR Part 372): Propylene is subject to the Toxic Release Reporting requirements of 40 CFR Part 372.
- TSCA Inventory Status: Propylene is listed on the TSCA Inventory.
- Chemical Accident Prevention Provisions (40 CFR Part 68): Propylene is subject to the reporting requirements of 40 CFR Part 68.

State Regulations:

- California Proposition 65: Propylene is not on the California Proposition 65 lists.
- The following States are known to have specific regulations applicable to ingredients in this product:
 - Massachusetts
 - Minnesota
 - New Jersey
 - Pennsylvania
 - Rhode Island

Other Regulations:

- Canada DSL/NDSL Inventory: Propylene is listed on the Domestic Substances List.

Section 11: Other Information

Hazard Ratings:

NFPA: H-1, F-4, R-1

HMIS: H-1, F-4, PH-1

WHIMS: A, B1

The HMIS ratings displayed on this MSDS are from the HMIS Third Edition. There have been significant changes made to the system. "PH" stands for "Physical Hazard" as defined in the OSHA Hazardous Communication Standard and replaces the former code "R" for "Reactivity."

Disclaimer: All information in this Material Safety Data Sheet is believed to be accurate and reliable. However, no guarantee or warranty of any kind is made with regard to the accuracy of information or the suitability of the recommendations contained herein. It is the user's responsibility to assess the safety and toxicity of this product under their own conditions of use and to comply with all applicable laws and regulations.



MATERIAL SAFETY DATA SHEET

Section 1: Product and Company Identification

Product: Map-Pro Premium Hand Torch Fuel Description: Propylene Date Issued: February 26, 2008 Last Revised: Original	Company: Victor Equipment Company Address: 2800 Airport Road Denton, TX 76207 Information: 1-940-566-2000 Emergency: CHEMTREC 1-800-424-9300 (US, Canada, Puerto Rico, Virgin Islands) 1-703-527-3887 (Outside Above Area)
--	--

Section 2: Hazardous Ingredients and Exposure Limits

Ingredient	CAS Number	Weight %	OSHA PEL (ppm)	ACGIH TLV (ppm)
Propylene	115-07-1	99.5 – 100	Not Established	500
Propane	74-98-6	0 – 0.5	1000	1000

Section 3: Physical and Chemical Properties

Boiling Point: -54 °F Melting Point: -301 °F Specific Gravity: 0.52 (liquid) Molecular Weight: 42 Appearance: Colorless gas	Vapor Pressure: 109.73 psig @ 70 °F Vapor Density (air=1): 1.5 @ 32 °F Solubility in Water: Slight Percent Volatile by Weight: 100 Odor: Hydrocarbon
--	---

Section 4: Fire and Explosion Data

Flash Point: -162 °F Auto Ignition: 927 °F Lower Explosion Limit: 2.0% by volume in air Upper Explosion Limit: 11.0% by volume in air General Fire Hazards: Liquid releases vapors that readily form a flammable mixture with air. Dangerous fire and explosion hazard when exposed to heat, sparks or flame. Vapors are heavier than air and may travel long distances to a point of ignition. Container may explode in heat or flame. Hazardous Combustion Products: Carbon monoxide, carbon dioxide and various non-combusted hydrocarbons. Extinguishing Media: Dry chemical, foam, carbon dioxide, Halon or water. Unusual Fire Hazards: Use extreme caution when fighting liquefied petroleum gas fires. Heated containers may rupture violently and suddenly without warning due to vessel overpressure (BLEVE-boiling liquid expanding vapor explosions). If safe to do so stop the flow of gas and allow the flame to burn out. Extinguishing the flame before shutting off the supply can cause formation of explosive mixtures. In some cases it may be preferred to allow the flame to continue to burn. Use water to cool equipment, surfaces and containers exposed to fire and excessive heat.
--

MATERIAL SAFETY DATA SHEET

Section 5: Reactivity Data

Chemical Stability: Stable

Hazardous Decomposition Products: Carbon oxides and various hydrocarbons formed when burned.

Incompatibility: Strong oxidizers such as nitrates, perchlorates, chlorine and fluorine.

Hazardous Polymerization: Does not polymerize except under special conditions (extreme temperature, pressure, oxidizers).

Conditions to Avoid: Sources of heat, sparks or flame.

Section 6: Hazards Identification

Overview: This product contains propylene a colorless liquid that rapidly turns into a gas at standard atmospheric temperatures and pressure. Propylene has a slight hydrocarbon odor. In commerce propylene is packaged as a liquified gas under pressure. Propylene is extremely flammable and explosive. At high concentrations it acts as a simple asphixiant by diluting and displacing oxygen, particularly in confined spaces. Direct contact with liquefied product may cause freeze burns and frostbite. Use this product only in well ventilated areas and, where appropriate, proper respiratory protection and personal protective equipment should be worn.

Primary Entry Routes: Inhalation

Target Organs: Respiratory system

Potential Health Effects:

- **Inhalation:** Product is an anesthetic at high concentrations. Inhalation may cause central nervous system depression producing dizziness, drowsiness, headache, and similar narcotic symptoms. Extremely high concentrations can cause asphyxiation and death by displacing oxygen from the breathing atmosphere.
- **Eyes:** Vapor is generally non-irritating to the eyes. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frostbite.
- **Skin:** Vapor is generally non-irritating to the skin. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frostbite.
- **Ingestion:** Ingestion is not likely.

Medical Conditions Aggravated by Exposure: Chronic diseases or disorders of the respiratory system.

Toxicological Information: Propylene is an anesthetic and is mildly irritating to the mucous membranes. At high concentrations propylene acts as a simple asphixiant without significant potential for systemic toxicity. High concentrations can cause death due to oxygen depletion. Toxicity data can be found in the Registry of Toxic Effects of Chemical Substances available on-line from the National Institute for Occupational Safety and Health (NIOSH).

Carcinogenic Effects: Propylene is not identified as being carcinogenic by the International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP), ACGIH or OSHA.

Section 7: First Aid Measures

Eye Contact: Flush eyes with plenty of water for at least 15 minutes while occasionally lifting the eyelids. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation or redness develops. In case of frostbite, place affected area in warm water or wrap in blankets if warm water is not available. DO NOT USE HOT WATER. Seek immediate medical attention.

Inhalation: Remove to fresh air. Administer oxygen or artificial respiration if necessary. Seek immediate medical attention.

Ingestion: Risk of ingestion is extremely low. Seek immediate medical attention in cases of ingestion or oral exposure.

MATERIAL SAFETY DATA SHEET

Section 8: Personal Protective Equipment

Engineering Controls: Good industrial hygiene practice requires that engineering controls be used where feasible to reduce workplace concentrations of hazardous materials.

Ventilation: Use adequate ventilation to keep gas and vapor concentrations of this product below the occupational exposure and flammability limits, particularly in confined spaces. Use mechanical ventilation that is explosion proof.

Respiratory Protection: Maintain oxygen levels above 19.5% in the workplace. Respirators must be worn if ambient concentrations of contaminants exceed prescribed exposure limits. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134). Select respirator based on its suitability to provide adequate worker protection for given work conditions, level of airborne contamination, and presence of sufficient oxygen. When required, only NIOSH approved respirators should be used.

Protective Clothing: Protective clothing should be worn to prevent skin contact. Protective gloves should be worn as required for welding or burning. Use insulated gloves where there is the possibility of liquid contact.

Eye Protection: Use safety glasses or goggles as required for welding or burning. Use splash-proof goggles or faceshield where there is the possibility of liquid contact.

Section 9: Handling and Storage

Handling Precautions: Keep away from flame, sparks and excessive temperatures. Use only in well-ventilated areas.

Storage Requirements: Store in a cool, dry, well-ventilated area away from sources of ignition, strong oxidizers or other incompatible materials. Post "No Smoking or Open Flame" signs in the storage and use areas. Protect cylinders against physical damage. Do not cut, drill, grind or weld on empty cylinders since they may contain explosive residues. Do not attempt to refill cylinders.

Spill Response Procedures: Evacuate area of all unnecessary personnel. Remove or shut off all sources of ignition. Ventilate the area thoroughly.

Disposal: Waste disposal must be in accordance with appropriate Federal, State and local regulations.

DOT Requirements: Product is classified as a Hazardous Substance under 49 CFR 172.101.

Shipping Name: Propylene

Hazard Class: 2.1 (Flammable Gas)

ID Number: UN 1077

Packing Group: Not Applicable

Marking: Propylene, UN 1077

Label: Flammable Gas

Placard: Flammable Gas / UN1077

Hazardous Substance/RQ: Not Applicable

Shipping Description: Propylene, 2.1 (Flammable Gas), UN 1077

Packaging References: 49 CFR 173.304, 173.306, 173.314 and 173.315

Section 10: Regulatory Information

US Federal Regulations:

- OSHA Hazardous Communication (29 CFR Part 1910.1200): This product is hazardous as defined in OSHA's Hazard Communication standard.
- OSHA Process Safety Management (29 CFR Part 1910.119): This product may be subject to OSHA's Process Safety Management of Highly Hazardous Chemicals standard.
- CERCLA Reportable Quantities (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

MATERIAL SAFETY DATA SHEET

- Extremely Hazardous Substances (40 CFR Part 355): This product is not regulated under 40 CFR Part 355.
- SARA 311/312 Hazard Class (40 CFR Part 370): The following hazard categories apply to this product:
 - Acute Health Hazard
 - Fire Hazard
 - Sudden Release of Pressure
- SARA 313 (40 CFR Part 372): Propylene is subject to the Toxic Release Reporting requirements of 40 CFR Part 372.
- TSCA Inventory Status: Propylene is listed on the TSCA Inventory.
- Chemical Accident Prevention Provisions (40 CFR Part 68): Propylene is subject to the reporting requirements of 40 CFR Part 68.

State Regulations:

- California Proposition 65: Propylene is not on the California Proposition 65 lists.
- The following States are known to have specific regulations applicable to ingredients in this product:
 - Massachusetts
 - Minnesota
 - New Jersey
 - Pennsylvania
 - Rhode Island

Other Regulations:

- Canada DSL/NDSL Inventory: Propylene is listed on the Domestic Substances List.

Section 11: Other Information

Hazard Ratings:

NFPA:	H-1, F-4, R-1
HMIS [®] :	H-1, F-4, PH-1
WHIMS:	A, B1

The HMIS ratings displayed on this MSDS are from the HMIS Third Edition. There have been significant changes made to the system. "PH" stands for "Physical Hazard" as defined in the OSHA Hazardous Communication Standard and replaces the former code "R" for "Reactivity."

Disclaimer: All information in this Material Safety Data Sheet is believed to be accurate and reliable. However, no guarantee or warranty of any kind is made with regard to the accuracy of information or the suitability of the recommendations contained herein. It is the user's responsibility to assess the safety and toxicity of this product under their own conditions of use and to comply with all applicable laws and regulations.

VICTOR®**MATERIAL SAFETY DATA SHEET**

CHEMTREC Phone No. (800) 424 - 9300

Victor Equipment Company
2800 Airport Road
Denton, Texas 76207(940) 566 - 2000
Fax: (940) 381 - 1265This MSDS is based on air/fuel or oxy/fuel process.
There may be other cautions for electric process.Date Prepared: January 1, 1991
Date Revised: March 1, 2007Form Number: 0056-1296
Core Part No: 0916-0009**Material Safety Data Sheet****SECTION I - MATERIAL IDENTIFICATION****Product Name:** Liquefied Petroleum Gas with Methyl Acetylene-Propadiene (0916-0009)**Product Use:** Welding Fuel**SECTION II - HAZARDOUS INGREDIENTS****OSHA Hazardous Components (29 CFR 1910.1200) EXPOSURE LIMITS: 8 HR. TWA**

	OSHA PEL	ACGIH TLV
Methyl acetylene-propadiene (CAS # 56960-91-9)	1000 ppm	1000 ppm
Liquefied petroleum gas (CAS #68476-85-7)	1000 ppm	1000 ppm

SECTION III - HAZARDS IDENTIFICATIONS**EMERGENCY OVERVIEW:** Flammable gas. May cause flash fire or explosion. Contents under pressure. Harmful if inhaled.**POTENTIAL HEALTH EFFECTS:****INHALATION:** Can cause severe central nervous system depression (including unconsciousness). May cause headaches and dizziness. May cause asphyxiation in high concentrations. Prolonged inhalation may be harmful.**EYE CONTACT:** Direct contact with liquefied gas can result in eye burns.**SKIN CONTACT:** No hazard in normal industrial use.**INGESTION:** Ingestion not likely, product is a gas at room temperature.**CHRONIC:** Unknown.**CARCINOGENICITY:** LISTED IN NTP? No IARC? No OSHA Regulated? No

MAPP® Gas

SECTION IV - FIRST AID MEASURES

- INHALATION:** Remove to fresh air. If not breathing, give artificial respiration and/or give oxygen by trained personnel. Seek medical attention.
- EYE CONTACT:** Immediately flush eyes with plenty of water. Get medical attention if irritation persists.
- SKIN CONTACT:** Avoid breathing vapors from heated material.
- INGESTION:** No emergency care anticipated.

SECTION V - FIRE FIGHTING MEASURES

- Flashpoint (Method):** -144°F (C.C.)
- Flammable Limits:** Lower: 3.0 Upper: 11.0
- Autoignition Temperature:** 850°F

GENERAL HAZARD: Flammable gas. Can readily form explosive mixtures at or above the flashpoint. Flashback along vapor trail possible.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire from a safe distance. DO NOT extinguish a gas fire unless effective immediate shut-off of gas flow is possible. Explosive vapors could form. As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: DO NOT EXTINGUISH. Use water to cool containers. If safe to do, shut off source of fuel. Increase ventilation to prevent flammable air mixture.

HAZARDOUS COMBUSTION PRODUCTS: Smoke, oxides of carbon.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources including internal combustion engines and power tools. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Avoid breathing vapors. Avoid contact with eyes, skin, and clothing.

SECTION VII - HANDLING AND STORAGE

Use spark-proof tools and explosion proof equipment. Ground and bond containers when transferring material. Do not reuse this container. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly sealed and promptly returned to a drum reconditioner, or disposed of properly. Keep away from heat, sparks and flame. Store in a cool dry place.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

MAPP® Gas

- ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
- PERSONAL PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
- PROTECTIVE CLOTHING:** Wear safety glasses with side shields (or goggles) and a face shield.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	97 psig @ 70°F	Vapor Density (Air=1):	>1
Specific Gravity:	0.57 (liquid)	Evaporation Rate	
Solubility in Water:	Negligible	(n-Butyl Acetate=1):	NA
pH:	NA	Freezing Point:	ND
Boiling Point:	-54°F		
Appearance & Odor:	Colorless gas with characteristic, pungent odor.		

SECTION X - STABILITY AND REACTIVITY

- GENERAL:** Stable
- INCOMPATIBLE MATERIALS:** Natural rubber, copper alloys >65%, silver, mercury, halogens, acids, potassium, metallic sodium, oxidizers.
- CONDITIONS TO AVOID:** Heat, ignition sources.
- HAZARDOUS POLYMERIZATION:** Will not occur.

SECTION XI - TOXICOLOGICAL INFORMATION

No data available.

SECTION XII - ECOLOGICAL INFORMATION

Not applicable.

SECTION XIII - DISPOSAL CONSIDERATIONS

Do not attempt to dispose of waste or unused quantities. Return in the shipping container properly labeled, with valve protection cap in place to supplier for proper disposal.

SECTION XIV - TRANSPORTATION INFORMATION

- PROPER SHIPPING NAME:** Methyl Acetylene and Propadiene Mixtures, Stabilized

MAPP® Gas

HAZARD CLASS: Flammable gas (2.1)
IDENTIFICATION NUMBER: UN 1060
DOT Emergency Guide #: 22
Reportable Quantity (RQ): None

SECTION XV - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act) All components are listed on the TSCA inventory.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):
None. We recommend you contact local authorities for other reporting requirements.

SARA TITLE III (Superfund Amendments and Reauthorization Act):
311/312 Hazard Categories: Acute, Ignitable, Sudden Release of Pressure.

313 Reportable Ingredients: None

SECTION XVI - OTHER INFORMATION

PREPARED BY: TALEM, Inc. - Technical Services Division (817) 335 - 1186

FOOTNOTES:

NA - Not Applicable NE - Data Not Established CS - Cancer Suspect Agent OX - Oxidizer ND - No Data Cor - Corrosive
CALC - Calculated EST - Estimated STEL - Short Term Exposure Limit TLV - Threshold Limit Value
PEL - Permissible Exposure Limit TWA - Time Weighted Average, 8 hours

THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE. NEITHER THE SELLER NOR PREPARER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE INFORMATION PRESENTED.