SAFETY DATA SHEET

According to Safe Work Australia

Printing date 12.08.2014 Revision: 12.08.2014

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: TF-ULTRA GAS

Product Code: 326439

Recommended Use of the Chemical and Restriction on Use: Commercial and industrial applications.

Details of Manufacturer or Importer:
Primus Australia Pty Ltd
3/20 Enterprise Drive
Bundoora VIC 3083

Phone Number: 03 9468 4400

Emergency telephone number: National Poison Information Centre: 13 11 26

2 . HAZARDS IDENTIFICATION

Hazardous Nature:


flame

Flam. Gas 1 H220 Extremely flammable gas.

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

Label Elements

Signal Word Danger

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

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.
P403 Store in a well-ventilated place.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:			
115-07-1	1-Propene	Flam. Gas 1, H220; Press. Gas, H280	>99.5%

4 . FIRST AID MEASURES

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.

Skin Contact:
In case of frostbite or freeze burns immediately apply lukewarm water (< 30 °C) to the affected area to warm up. Seek medical attention.

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Eye Contact:
In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:
Remove victim to fresh air and keep warm. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Information for Doctor

Symptoms Caused by Exposure:
Inhalation: May cause irritation to the nose and throat, headache, nausea, vomiting, dizziness, drowsiness and euphoria. In poorly ventilated or confined spaces it may cause unconsciousness and asphyxiation.
Skin contact: Direct contact with liquid or gas under pressure can cause freeze burns.
Eye contact: Direct contact with liquid or gas under pressure can cause freeze burns.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Carbon dioxide, sand or extinguishing powder. Do not use water spray or foam.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of carbon and various hydrocarbons.
Pressurised container. On heating there is a risk of bursting due to internal pressure build-up. Use water spray to cool fire exposed containers.
In case of fire, if unable to cut off the gas supply allow it to burn. Explosive vapours may accumulate to form explosive concentrations. They may travel from the source to be ignited and flash back. Water spray may be used for vapour dispersal.

Special Protective Equipment and Precautions for Fire Fighters:
Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking. Disperse gas with water spray.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and allow product to evaporate. Use only non-sparking tools. Take precautionary measures against static discharge.

7 . HANDLING AND STORAGE

Precautions for Safe Handling:

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Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Open and handle receptacle with care. Use only outdoors or in a well-ventilated area. Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Material can accumulate static charges which may cause an electrical spark. Cylinders, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.
Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:
Store in a tightly closed original container in a cool, dry, and well ventilated area. Do not expose to temperatures exceeding 50 °C. Protect from heat, sparks, flame and other sources of ignition. Keep away from strong oxidizing materials. Non-refillable cylinders containing propylene should be stored in an upright position with the connection thread protected with a protective cover. Do not drop or roll cylinders. Protect from physical damage.

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:	
115-07-1 1-Propene	
NES	Asphyxiant

Engineering Contols:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Personal Protective Equipment (PPE):

Respiratory Protection:
Use a Safe Work Australia approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:
Leather, wool or aramid blend gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.
Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:
Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Liquified gas
Colour:	Colourless
Odour:	No information available
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/Melting range:	No information available

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Initial Boiling Point/Boiling Range:	-48 °C to -23 °C
Flash Point:	-108 °C
Flammability:	Extremely flammable liquefied gas.
Auto-ignition Temperature:	497 °C
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	2 Vol %
Upper:	11 Vol %
Vapour Pressure at 21 °C:	7.56 Bar
Density at 20 °C:	0.52 kg/L (liquid)
Relative Density:	No information available
Vapour Density at 15 °C:	1.5 g/cm³
Evaporation Rate:	No information available
Solubility in Water:	Slight

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Can form explosive mixture with air.

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Strong oxidizers such at nitrates, perchlorates, chlorine and fluorine.

Hazardous Decomposition Products: Oxides of carbon and various hydrocarbons.

11 . TOXICOLOGICAL INFORMATION

Toxicity:

Acute Health Effects
Inhalation:
May cause irritation to the nose and throat, headache, nausea, vomiting, dizziness, drowsiness and euphoria. In poorly ventilated or confined spaces it may cause unconsciousness and asphyxiation.
Skin: Contact with liquid will cause freeze burns.
Eye: Contact with liquid will cause freeze burns.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: No sensitising effects known.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

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12 . ECOLOGICAL INFORMATION

Ecotoxicity: No information available

Aquatic toxicity: No information available

Persistence and Degradability: No information available

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 . TRANSPORT INFORMATION

UN Number	1077
Proper Shipping Name	PROPYLENE
Dangerous Goods Class	Not applicable
Packing Group:	Not applicable
Marine pollutant:	No
Hazchem Code:	2YE
Special Provisions:	Not applicable
Limited Quantities:	0
Packagings & IBCs - Packing Instruction:	P200
Packagings & IBCs - Special Packing Provisions:	Not applicable
Portable Tanks & Bulk Contatiners - Instructions:	T50
Portable Tanks & Bulk Containers - Special Provisions:	Not applicable

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:	
115-07-1	1-Propene

16 . OTHER INFORMATION

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Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average

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NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Disclaimer

This MSDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”

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