PROPYLENE
MATERIAL SAFETY DATA SHEET
DATE PREPARED: April 2010
Items
Quickfire Torch Kit Fuel 5.45 oz
Quickfire Replacement Fuel 5.45 oz
Fat Boy Replacement Fuel Cylinder

1. PRODUCT INFORMATION

Product Identifier: Max Power Propylene (Odorized)

Synonyms: Methyl ethylene, Propane
Chemical Family: Olefins
Chemical Formula: C3H6
Application and Use: Multi-purpose fuel or chemical feedstock
Product Description: Colorless, Hydrocarbon odor composed, stored and handled as liquids under pressure
DOT Hazard Class: Flammable Gas
C.A.S. Number: 115-07-1
UN 1077

TELEPHONE NUMBERS

Emergency 24hr.	
Canada	1-800-265-0212
	(ERP 2-0010-062)
US	1-800-424-9300

MANUFACTURER/SUPPLIER

BernzOmatic
1 BernzOmatic Drive
Medina, NY 14103
585-798-4949

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a)(i) to (iv) or Paragraph 14 (a) of the Hazardous Products Act:

NAME	%	CAS #
Propylene	99.5 v/v	115-07-1
Propane	0 – 0.5 v/v	74-98-8

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State:	colorless gas @ s.t.p
Specific Gravity:	0.5193 @ 68 degrees F
Vapor Density:	1.46 (air=1)
Boiling Point:	-53.8 degrees F (-47.7 degrees C)
Solubility in Water:	slightly soluble (0.18 wt% @ 100 degrees F)
Melting Point:	-301 degrees F (-185 degrees C)
Vapor Pressure:	160psia@68 degrees F
Volatiles:	100% by volume
Molecular Weight:	42.08
Density:	0.51 g/cc at 15 deg C
Appearance/odor:	colorless gas, stenched to allow detection of leaks

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

May cause central nervous system disorder (e.g. loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.
Breathing high vapor concentrations (saturated vapors) for a few minutes may be fatal. Saturated vapors can be encountered in confined spaces and/or under conditions of poor ventilation.
May cause irritation, breathing failure, coma and death without any warning odor being sensed.
Inhalation exposure to this product at extremely high concentrations, as in accidental releases in which concentrations reach or exceed the flammable range, may result in cardiac arrhythmias.

EYE CONTACT:
Vapors may cause a slight irritation and liquid contact with the eye may cause blindness.

SKIN CONTACT:
Exposure to rapidly expanding gas or vaporizing liquid may cause frostbite (cold burns)

INGESTION:
Not considered to be a hazard

INHALATION:
Exposure to low concentrations may result in a mild anesthetic action. Only exposures to extremely high concentrations will result in physiological effects.

SYSTEMIC AND OTHER EFFECTS:
In human studies, propylene at very high concentrations has caused tearing, coughing, and vomiting.

CARCINOGENICITY:
No evidence has been listed by the NTP and is listed by the IARC as “not classifiable as to its’ carcinogenicity to humans”.

TERATOLOGY:
No evidence.

REPRODUCTIVE EFFECTS:
No evidence has been listed.

5. FIRST AID MEASURES

INHALATION:
In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:
In case of cold burns caused by rapidly expanding gas or vaporizing liquid, get prompt medical attention.

SKIN CONTACT:
In case of cold burns caused by rapidly expanding gas or vaporizing liquid, get prompt medical attention.

INGESTION:
Do NOT induce vomiting if liquid propylene has been swallowed. Seek immediate medical attention.

6. PREVENTITIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:
The selection of personal protective equipment varies, depending upon conditions of use. In open systems where contact is likely, wear gas-proof goggles, face shield, chemical resistant overalls, and appropriate thermal/chemical gloves. Where skin and eye contact is unlikely, but may occur as a result of short and/or periodic exposures, wear long sleeves, chemical resistant gloves, gas-proof goggles, and a face shield.
Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

ENGINEERING CONTROLS:
The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care.
Store in a cool, well-ventilated place away from incompatible materials. Store as pressurized liquid in a pressure vessel.
Store and load the container at normal (up to 38 deg C) temperature and at atmospheric pressure.
Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source, Use proper relaxation and grounding procedures.
Empty containers may contain product residue. Do not pressurize, cut, heat or weld empty container. Do not reuse empty containers without commercial cleaning or reconditioning.

LAND SPILL:
Eliminate source of ignition. Keep away, Prevent additional discharge of material, if possible to do so without hazard.
Vapors or dust may be harmful or fatal. Warn occupants of downwind areas.
Allow to evaporate.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

WATER FILL:
Eliminate source of ignition. Vapors or dust may be harmful or fatal. Warn occupants and shipping in downwind area.
Allow to evaporate from surface.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint: -162 deg F
Auto ignition: 860 deg F (460 deg C)
Flammable Limits: LEL 2.0% UEL 11.1%

GENERAL HAZARDS:
Extremely flammable: material will readily ignite at normal temperatures.
Flammable Gas: may readily form flammable mixtures at or above the flash point.
Toxic gases will form upon combustions.
Static Discharge: material may accumulate static charges which may cause a fire.
Auto-refrigeration: drains may become plugged and valves may become inoperable because of the formation of ice due to expanding vapors or vaporizing liquids.

FIRE FIGHTING:
Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapors.
Do not extinguish flames at leak because possibility of uncontrolled explosive re-ignition exists. Cut off fuel and/or allow fire to burn out.
Extinguish small residual fires with dry chemical powder or water spray.
Try to cover liquid spills with foam.
Respiratory and eye protection required for fire fighting personnel.
A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:
Smoke, carbon monoxide, carbon dioxide under thermal decomposition.

8. REACTIVITY DATA

STABILITY:
This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:
Concentrated mineral acids, halogenated compounds, nitrogen dioxide, oxidizing agents, and molten sulfur.

HAZARDOUS DECOMPOSITION:
Incomplete combustion may result in carbon monoxide, carbon dioxide, and other toxic gases.

9. NOTES

All components of this product are listed on the TSCA inventory.

Nexen has no knowledge how its customers will handle, store, transfer, distribute or use odorized propylene or non-odorized propylene and therefore makes no warranty regarding the propylene or the odorant after the custody of these materials passes to the customers. It is recommended that Nixon's customers provide their employees and subsequent customers with information regarding the characteristics of propylene, how those characteristics relate to the employees or customers use including the limitation in detecting non-odorized or that may be added during subsequent distribution.
With proper handling, transportation and storage, adding a chemical odorant such as ethyl merchantman has proven to be a very effective warning device but all odorants have certain limitations. The effectiveness of the odorant may be diminished by a person's sense of smell, by competing odors and by oxidation, which may cause a potentially dangerous situation.
Further safety related information in contained on the Material Safety Data Sheet Industry experience has shown that natural gas streams may contain trace amounts of radon, a naturally occurring radioactive gas, and radioactive particulate decay products which can accumulate in process equipment and storage vessels. These materials emit gamma, alpha and beta forms of radiation. Since gamma radiation can penetrate the walls of intact equipment a potential for exposure could exist at or adjacent to the external surface of process equipment that contain radon-enriched process streams or accumulated deposits of radon decay products. Equipment emitting gamma radiation at dose rates above background should be assumed to be contaminated with internal deposits of alpha- and beta-emitting radon decay products.
Measures should be taken to preclude the inhalation or ingestion of alpha- or beta-emitting materials. Before performing maintenance on contaminated environment, all process shut-down safety and "gas freeing" procedures should be followed and at least a 4 hour lapse should be allowed between process stream shut-down and the opening of equipment repair operations. This time will allow the gamma radiation dose rates to be reduced to background levels. Maintenance personnel should wear appropriate personal protective equipment and follow recommended industrial hygiene/safety and environmental procedures in accordance with prevailing regulations and industry guidelines.

10. PREPARATION

Date Prepared	June 2008
Prepared by	BernzOmatic 1 BernzOmatic Drive Medina, NY 14103

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