

MAGNA INDUSTRIES INC -- DISPOSABLE LPG FUEL CYLINDER -- 3439-00-542-0531  
===== Product Identification =====

Product ID:DISPOSABLE LPG FUEL CYLINDER  
MSDS Date:01/01/1987  
FSC:3439  
NIIN:00-542-0531  
Kit Part:Y  
MSDS Number: BJRFC  
=== Responsible Party ===  
Company Name:MAGNA INDUSTRIES INC  
Address:2201 WEST 110TH STREET  
City:CLEVELAND  
State:OH  
ZIP:44102  
Country:US  
Info Phone Num:216-251-3334 FAX: 216-2  
51-7778  
Emergency Phone Num:216-251-3334 OR 800-969-3334  
CAGE:0AJN5  
=== Contractor Identification ===  
Company Name:BLACK AND CO  
Address:5351 W MINNESOTA ST  
Box:UNKNOW  
City:INDIANAPOLIS  
State:IN  
ZIP:46241  
Country:US  
Phone:317-243-8676  
Contract Num:SP0490-99-M-W907  
CAGE:00WU8  
Company Name:MAGNA INDUSTRIES INC  
Address:2201 WEST 110TH STREET  
Box:City:CLEVELAND  
State:OH  
ZIP:44102  
Country:US  
Phone:216-251-3334 OR 800-969-3334  
CAGE:0AJN5

===== Composition/Information on Ingredients =====

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Ingred Name:PROPANE  
CAS:74-98-6  
RTECS #:TX2275000  
Fraction by Wt: 95-98%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1000 PPM  
ACGIH TLV:ASPHYXIAN; 9192

Ingred Name:ETHANE  
CAS:74-84-0  
RTECS #:KH3800000  
Fraction by Wt: 3-5%  
Other REC Limits:NONE SPECIFIED  
ACGIH TLV:ASPHYXIAN 9192

Ingred Name:BUTANE  
CAS:106-97-8  
RTECS #:EJ4200000  
Fraction by Wt: 1-3%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:800 PPM  
ACGIH TLV:800 PPM; 9192

Ingred Name:ISOBUTANE  
CAS:75-28-5  
RTECS #:TZ4300000  
Fraction by Wt: 0  
.1-0.3%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1000 PPM  
ACGIH TLV:1000 PPM

Ingred Name:METHANE  
CAS:74-82-8  
RTECS #:PA1490000  
Fraction by Wt: 0.1-0.2%  
Other REC Limits:NONE SPECIFIED  
ACGIH TLV:ASPHYXIAN; 9192

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:LIQUID MAY CAUSE "COLD BURNS" TO EYES  
& SKIN SIMILAR TO FROSTBITE. INHAL

ATION OF CONCENTRATIONS BELOW

10,000 PPM HAS LITTLE PHYSIOLOGICAL EFFECT. HIGHER CONCENTRATIONS MAY CAUSE DIZZINESS AND UNCONSCIOUSNESS DUE TO ASPHYXIATION. THERE ARE NO REPORTED EFFECTS FROM LONG-TERM LOW-LEVEL EXPOSURE.

Explanation of Carcinogenicity: THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.

Effects of Overexposure: ABOVE 100,000 PPM; SYMPTOMS OF EXPOSURE MAY INCLUDE DIZZINESS, STUPOR, AND UNCONSCIOUSNESS. ACGIH CLASSIFIES

PROPANE AS AN ASPHYXIANT. THERE IS NO RECOMMENDED TLV.

Medical Cond Aggravated by Exposure: NONE KNOWN

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===== First Aid Measures =====

First Aid: EYES: FOR LIQUID CONTACT, FLUSH EYES WITH LUKEWARM WATER FOR 15 MINUTES. GET MEDICAL CARE. SKIN: FOR BURNS FROM LIQUID CONTACT, IMMEDIATELY PLACE AFFECTED AREA IN LUKEWARM WATER AND KEEP AT THIS TEMPERATURE UNTIL CIRCULATION RETURNS OR USE BODY HEAT TO WARM FROSTBITE

AREAS. GET MEDICAL CARE. INHALATION: REMOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL CARE.

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===== Fire Fighting Measures =====

Flash Point Method: CC

Flash Point: -102.8C, -153.F

Autoignition Temp: 432.2C, 810.F

Lower Limits: 2.4

Upper Limits: 9.5

Extinguishing Media: USE CARBON DIOXIDE OR DRY CHEMICAL. DO NOT EXTINGUISH FIRE UNLESS THE SOURCE OF GAS IS TURNED OFF.

Fire Fighting Procedures: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A

FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. EVACUATE AREA.

Unusual Fire/Explosion Hazard: METAL CYLINDERS REQUIRE COOLING WITH WATER TO PREVENT FLAME IMPINGEMENT AND THE WEAKENING OF METAL.

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===== Accidental Release Measures =====

Spill Release Procedures: STOP LEAK IF POSSIBLE. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA. EVACUATE ALL PERSONNEL. PROPANE IS HEAVIER THAN AIR

R AND CAN SETTLE INTO LOW AREAS. REMAIN UPWIND OF  
LEAK. PREVENT VAPOR FROM ENTERING INTO SEWER, BASEMENTS OR  
CONFINED AREAS.

Neutralizing Agent:NOT APPLICABLE.

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Handling and Storage  
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Handling and Storage Precautions:CYLINDERS SHOULD NOT BE DROPPED.  
Other Precautions:STORAGE TEMPERATURE SHOULD BE KEPT BELOW 125F.  
CYLINDERS MUST NOT BE RECHARGED.

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Exposure Controls/Personal Protection  
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Respiratory Protection:  
SELF-CONTAINED BREATHING APPARATUS WHERE THE  
CONCENTRATION OF PROPANE WOULD REDUCE OXYGEN LEVEL BELOW 18% IN  
INHALED AIR.  
Ventilation:USE EXPLOSION PROOF VENTILATION EQUIPMENT.  
Protective Gloves:INSULATED LEATHER GLOVES AS REQUIRED.  
Eye Protection:SAFETY GLASSES, GOGGLES OR FACE SHIELD  
Other Protective Equipment:NONE NORMALLY REQUIRED.  
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND  
RECOMMENDED PROCEDURES. USE PROPER CARE WHEN HANDLING AND STORING  
CYLINDERS.

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Supplemental Safety and Health  
REFER TO CGA BULLETIN SB-2 "OXYGEN DEFICIENT ATMOSPHERES".

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Physical/Chemical Properties  
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HCC:G2  
Boiling Pt:=-42.2C, -44.F  
Melt/Freeze Pt:=-187.8C, -306.F  
Vapor Pres:1013  
Vapor Density:1.52  
Spec Gravity:0.51  
Evaporation Rate & Reference:RAPID/GAS AT NORMAL COND.  
Solubility in Water:MODERATE  
Appearance and Odor:COLORLESS LIQUID. ODOR IS SIMILAR TO BOILING  
CABBAGE (ETHYL MERCAPTAIN ADDED)  
Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

KEEP SEPARATE FROM STRONG OXIDIZING AGENTS. GAS EXPLODES SPONTANEOUSLY WHEN MIXED WITH CHLORINE DIOXIDE.

Stability Condition to Avoid: HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION

Hazardous Decomposition Products: CARBON MONOXIDE

===== Disposal Considerations =====

Waste Disposal Methods: MOVE LEAKY CYLINDER TO OUTDOORS OR VENTILATED

HOOD. ALLOW GAS TO DISCHARGE AT MODERATE RATE. DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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