

**Material Safety Data Sheet**

May be used to comply with OSHA's  
Hazard Communication Standard 29  
CFR 1910.1200. Standard must be  
consulted for specific requirements.

**U.S. Department of Labor**

Occupational Safety and Health  
Administration (Non-Mandatory Form)  
Form Approved OMB No. 1218-0072

**Identity (As Used on Label and List)**  
**LIGHTERS, containing flammable**  
**gas (UN# 1057)**

*Note: Blank Spaces are not permitted. If any  
item is not applicable, or no information is  
available, the space must be marked to  
indicate that.*

**SECTION I**

<b>Supplier's Name</b> NSL Group (USA) Inc.	<b>Emergency Telephone Number</b> 1-800-424-9300
<b>Address</b> <i>Number, Street, City and Zip Code</i>  5690 Bandini Blvd. Bell, CA 90201	<b>Telephone Number for Information</b> 1-323-261-7293 <b>Date Prepared</b> January 2, 2007 <b>Signature of Preparer (Optional)</b>

**SECTION II - Hazardous Ingredients/ Identity Information**

<b>Hazardous Components</b> <i>Specific Chemical Identity, Common Name(s)</i>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>Other Limits Recommended</b>	<b>% (Optional)</b>
Butane (n-Butane) CAS #106-97-8	NA	800 PPM	NIOSH - 800 PPM	90
Propane (n-Propane, Propyl Hydride) CAS #74-98-6	1,000 PPM	1,000 PPM	NIOSH - 1,000 PPM	10

**NFPA Hazard Ratings**

Health - 1  
Flammability - 4  
Reactivity - 0

**HMIS Ratings**

Health - 0  
Flammability - 4  
Reactivity - 0

**SECTION III - Physical/Chemical Characteristics**

<b>Boiling Point</b>	10.9°F	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	0.56
<b>Vapor Pressure (mm Hg)</b>	1823	<b>Melting Point</b>	NA
<b>Vapor Density (Air = 1)</b>	2	<b>Evaporation Rate (Butyl Acetate = 1)</b>	>1
<b>Solubility in Water</b>	@ 77°C, 17cc per 1000 cc of Water		
<b>Appearance and Odor</b>	Clear, Odorless		

**SECTION IV - Fire and Explosion Hazard Data**

<b>Flash Point (Method Used)</b>	-120°F (O.C.)	<b>Flammable Limits</b>	NA	<b>LEL</b>	1.8	<b>UEL</b>	8.4
<b>Extinguishing Media</b>	Carbon dioxide, dry chemical, fog or water spray.						
<b>Special Fire Fighting Procedures</b>	Confine fire to immediate area. Disperse liquid or vapor if leaks occur.						
<b>Unusual Fire and Explosion Hazards</b>	Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.						

**SECTION V - Reactivity Data**

<b>Stability</b>	Unstable		<b>Conditions to Avoid</b>
	Stable	X	Heat, Sparks, Open Flames.
<b>Incompatibility (Materials to Avoid)</b>	Strong acids, alkalis and oxidizers.		
<b>Hazardous Decomposition or Byproducts</b>	Combustion may produce carbon monoxide.		
<b>Hazardous Polymerization</b>	May Occur		<b>Conditions to Avoid</b>
	Will Not Occur	X	NA

**SECTION VI - Health Hazard Data**

<b>Route(s) of Entry</b>	<b>Inhalation?</b> Yes	<b>Skin?</b> Yes	<b>Ingestion?</b> Yes
<b>Health Hazards (Acute and Chronic)</b>	Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.		
<b>Carcinogenicity</b>	<b>NTP?</b> No	<b>IARC Monographs?</b> No	<b>OSHA Regulated?</b> No
<b>Signs and Symptoms of Exposure</b>	Drowsiness or dizziness possible at low concentrations of the gases.		

**Medical Conditions****Generally Aggravated by Exposure**

Personnel with pre-existing chronic respiratory diseases should avoid exposure to these gases.

**Emergency and First Aid Procedures**

Remove affected personnel from contaminated area to fresh air. For respiratory distress, give air, oxygen, and administer cardio-pulmonary resuscitation as needed. For burns to eye, remove contact lenses and immediately flush with water for at least 15 minutes. Frozen skin should be flooded with warm water (105-115°F).

**SECTION VII - Precautions for Safe Handling and Use****Steps to be Taken in Case Material is Released or Spilled**

Remove all ignition sources. Ventilate area of leak to disperse the gas.

**Waste Disposal Method**

Discharge at moderate rate in well ventilated area without ignition sources.

**Precautions to be Taken in Handling and Storing**

Store in a cool, dry place. Keep away from heat, sparks and flame. Do not store in temperatures exceeding 120°F or in direct sunlight.

**Other Precautions**

Do not store with strong acids (e.g. hydrochloric acid, sulphuric acid), strong bases (e.g. sodium hydroxide, potassium hydroxide), oxidizing agents (e.g. perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, fluorine, bromine) and mixtures of nickel carbonyl and oxygen.

**SECTION VIII - Control Measures****Respiratory Protection (Specify Type)**

Not required for normal use. For excessive gas concentrations use NIOSH/MSHA approved SCBA.

Ventilation	Local Exhaust	Special
	Maintain level below .25 LEL.	NA
	Mechanical (General)	Other
	Maintain level below .25 LEL.	NA

Protective Gloves	Eye Protection
Rubber Gloves.	ANSI Approved Chemical Workers Goggles.

**Other Protective Clothing or Equipment**

Not Required.

**Work/Hygenic Practices**

On skin contact with butane, immediately immerse the affected body part in warm water.

**SECTION IX - Shipping Information**

WHMIS Classification:	A - Compressed Gas B-1 - Flammable Gas		
Department of Transportation:	Proper Shipping Name	Hazard Classification	UN No.
	Lighters, containing flammable gas	2.1	1057