

# Safety Data Sheet

Issuing Date

Revision Date

Revision Number

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Name

**UN-No** UN1057

**Recommended Use** Lighters.

### Supplier Address

Novelty, Inc.  
351 W Muskegon Dr  
Greenfield IN  
46140 US  
Phone: (317)462-3121

Emergency Contact:  
Chemtrec: 1-800-424-9300  
CCN# 16039

## 2. HAZARDS IDENTIFICATION

### DANGER!

### Emergency Overview

EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE  
MAY BE HARMFUL IF ABSORBED THROUGH SKIN  
May cause drowsiness and dizziness

**Appearance** Clear to yellow

**Physical State** Compressed liquefied gas,  
Gas.

**Odor** Slight

### OSHA Regulatory Status

This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold, but considers exposure to the chemical if user has direct eye and skin contact with the chemical. This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Potential Health Effects

#### Principle Routes of Exposure

Inhalation. Skin contact. Eye contact.

#### Acute Toxicity

##### Eyes

May cause irritation.

##### Skin

Harmful in contact with skin.

##### Inhalation

Readily forms high vapor concentrations May cause drowsiness and dizziness.

##### Ingestion

May be harmful if swallowed.

### Chronic Effects

Prolonged exposure may cause chronic effects. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

### Main Symptoms

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

### Aggravated Medical Conditions

Neurological disorders. Central nervous system.

**Interactions with Other Chemicals** Use of alcoholic beverages may enhance toxic effects.

**Environmental Hazard** See Section 12 for additional Ecological Information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Isobutane	75-28-5	15-40
Propane	74-98-6	1 - 5
Pentane	109-66-0	0.1 - 1
Oxirane, 2,3-dimethyl-	3266-23-7	< 0.1
Ethane	74-84-0	< 0.1
1-Butene	106-98-9	< 0.1

### 4. FIRST AID MEASURES

<b>General Advice</b>	In case of injury caused by fire: Flush with plenty of water immediately. Continue flushing during transport to hospital or medical center
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
<b>Inhalation</b>	Move victim to fresh air. Administer oxygen if breathing is difficult. Apply artificial respiration if victim is not breathing. Call a physician or Poison Control Center immediately.
<b>Ingestion</b>	Not an expected route of exposure. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.
<b>Notes to Physician</b>	Treat symptomatically.
<b>Protection of First-aiders</b>	Use personal protective equipment. Remove all sources of ignition.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	EXTREMELY FLAMMABLE Containers may explode when heated. Vapors are flammable
<b>Flash Point</b>	Not determined.
<b>Suitable Extinguishing Media</b>	Dry chemical or CO <sub>2</sub> . Water spray or fog.
<b>Uniform Fire Code</b>	• Compressed Gas: Flammable
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire. DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
<b>Hazardous Combustion Products</b>	Carbon oxides.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	No.
<b>Sensitivity to Static Discharge</b>	Yes.

**Specific Hazards Arising from the Chemical**

Will be easily ignited by heat, sparks or flames. Will form explosive mixtures with air. Vapors from liquefied gas are initially heavier than air and spread along ground. Vapors may travel to source of ignition and flash back. Ruptured cylinders may rocket.

**Protective Equipment and Precautions for Firefighters**

Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA****Health Hazard 1****Flammability 4****Stability 0****Physical and Chemical Hazards -**

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not attempt to stop leak, due to danger of explosion Pay attention to flashback. Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Contents under pressure.

**Environmental Precautions**

Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Prevent spreading of vapors through sewers, ventilation systems and confined areas.

**Methods for Containment**

If possible, turn leaking containers so that gas escapes rather than liquid. Isolate area until gas has dispersed.

**Methods for Cleaning Up**

Do not direct water at spill or source of leak. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Avoid breathing vapors or mists. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans.

**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. Keep in an area equipped with sprinklers.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isobutane 75-28-5	STEL: 1000 ppm	N/A	N/A
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>
Pentane 109-66-0	TWA: 600 ppm	TWA: 1000 ppm TWA: 2950 mg/m <sup>3</sup> (vacated) TWA: 600 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 750 ppm (vacated) STEL: 2250 mg/m <sup>3</sup>	IDLH: 1500 ppm Ceiling: 610 ppm 15 min Ceiling: 1800 mg/m <sup>3</sup> 15 min TWA: 120 ppm TWA: 350 mg/m <sup>3</sup>
Ethane 74-84-0	TWA: 1000 ppm		
1-Butene 106-98-9	TWA: 250 ppm		

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

**Personal Protective Equipment**  
**Eye/Face Protection** Safety glasses with side-shields.  
**Skin and Body Protection** Protective gloves.  
**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Provide regular cleaning of equipment, work area and clothing. Contaminated work clothing should not be allowed out of the workplace.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Clear to yellow.	<b>Odor</b>	Slight.
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Compressed liquefied gas Gas
<b>pH</b>	No information available	<b>Autoignition Temperature</b>	No information available
<b>Flash Point</b>	No information available.	<b>Boiling Point/Range</b>	No information available
<b>Decomposition Temperature</b>	No information available	<b>Explosion Limits</b>	No information available
<b>Melting Point/Range</b>	No information available	<b>Solubility</b>	No information available
<b>Flammability Limits in Air</b>	No information available	<b>Vapor Pressure</b>	No information available
<b>Water Solubility</b>	Insoluble in water.	<b>Partition Coefficient: n-octanol/water</b>	No information available
<b>Evaporation Rate</b>	No information available		
<b>Vapor Density</b>	No information available		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions. Heating may cause an explosion
<b>Incompatible Products</b>	No materials to be especially mentioned.
<b>Conditions to Avoid</b>	Extremes of temperature and direct sunlight. Keep away from open flames, hot surfaces and sources of ignition.
<b>Hazardous Decomposition Products</b>	Carbon oxides.
<b>Hazardous Reactions</b>	Hazardous polymerization does not occur
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information**                      Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethane	-	-	= 658 mg/L ( Rat ) 4 h
Propane	-	-	= 658 mg/L ( Rat ) 4 h
Isobutane	-	-	= 658 mg/L ( Rat ) 4 h
1-Butene	-	-	= 658 mg/L ( Rat ) 4 h
Pentane	-	= 3000 mg/kg ( Rabbit )	= 364 g/m <sup>3</sup> ( Rat ) 4 h

### Chronic Toxicity

**Chronic Toxicity**                      Prolonged exposure may cause chronic effects. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

**Target Organ Effects**                      Central nervous system (CNS).

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pentane		LC50: 9.87 mg/L (96 h ) Oncorhynchus mykiss LC50: 9.99 mg/L (96 h ) Lepomis macrochirus LC50: 11.59 mg/L (96 h ) Pimephales promelas		EC50: 9.74 mg/L (48 h ) Daphnia magna

Chemical Name	Log Pow
Isobutane	2.88
Propane	2.3
Pentane	3.39
Ethane	2.8
1-Butene	2.42

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated Packaging** Dispose of in accordance with local regulations.

**US EPA Waste Number** D001

**California Hazardous Waste Codes** 213

Chemical Name	California EHW	California Carc	California Hazardous Waste	California Waste - Part 2
Pentane			Toxic Ignitable	

### 14. TRANSPORT INFORMATION

**Emergency Response Guide Number** 115

**DOT**

**Description** UN1057, LIGHTERS, 2.1

**TDG**

**Description** UN1057, LIGHTER REFILLS, 2.1

**MEX**

**Description** UN1057 LIGHTERS, 2.1

**ICAO**

**Description** UN1057, LIGHTERS, 2.1

**IATA**

**Description** UN1057, LIGHTERS, 2.1

**IMDG/IMO**

**Description** UN1057, LIGHTERS, 2.1

## 15. REGULATORY INFORMATION

### International Inventories

TSCA Complies  
DSL Not determined

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, manganese salt			X	X	X
Butane	X	X	X		

### International Regulations

#### **Mexico - Grade**

No information available.

Chemical Name	Carcinogen Status	Exposure Limits
Butane		Mexico: TWA 800 ppm Mexico: TWA 1900 mg/m <sup>3</sup>

#### **Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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**WHMIS Hazard Class**

A Compressed gases  
B1 Flammable gas

**16. OTHER INFORMATION**

Issuing Date

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Revision Note

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**General Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**