SAFETY DATA SHEET

Date Prepared:
April 18, 2016 Version 2

SECTION 1 – IDENTIFICATION	
GHS Product Name:	Lighters
Trade Name:	Crocs, Crocs Max, Handy, Super Flex, Click N Flame, Click N Flame Classic
Product Type:	Liquefied Gas
Identified Use:	Cigarette Lighters and Multi-Purpose Utility Lighters
Manufacturer/ Vendor Information:	Supplier information: Crocs Lighter Inc. 350 Ranger Avenue, Unit C Brea, CA 92821 Phone: 714-577-0778 Emergency Telephone Number: Infotrac 1-800-535-5053. Customer ID#106673
SDS Contact:	Product Safety Department
Telephone number:	(714) 577-0778

SECTION 2 – HAZARD(S) IDENTIFICATION	
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This SDS confirms to HazCom 2012.	
Classification in Accordance with 29 CFR § 1910.1200:	Flammable Gas – Category 1 Gas Under Pressure - Liquefied Gas
Signal Word:	Danger
Hazard Statements:	Extremely flammable gas Contains gas under pressure; may explode if heated
GHS Label Elements: Hazard Pictograms	
Precautionary Statements:	<u>Prevention:</u> Keep out of reach of children; Keep away from heat, spark, open flames and hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Do not expose to temperatures above 50 C/122 F; <u>Response:</u> Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. <u>Storage:</u> Store in a cool well-ventilated place. Protect from sunlight.

Any Hazards Not Otherwise Classified:	Contact with liquefied gas may cause cold burns or frostbite to skin or eyes.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture	
CAS No.	N/A
Product Code	N/A
Mixture of substances listed below with nonhazardous additions.	
Butane	80-95%
Propane	20-5%

SECTION 4 – FIRST AID MEASURES

Eyes:	Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Skin:	In the event of contact with liquefied gas causing frostbite to the skin, do not attempt to rewarm the affected area on site. Do not rub affected area or apply dry heat. Flush contaminated skin with plenty of water. To avoid the risk of discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it as the product is extremely flammable.
Inhalation:	This product is extremely flammable. Take proper precautions (*e.g.*, remove any sources of ignition). Remove victim to a fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Immediately transport victim to an emergency care facility.
Ingestion:	Ingestion of this product is unlikely since liquefied petroleum gas is a gas at room temperature
Most Important Symptoms and Effects, Both Acute and Delayed	
Symptoms/Injuries after Inhalation:	No known significant effects or critical hazards
Symptoms/Injuries after Skin Contact:	Direct contact with liquefied gas may cause cold burns or frostbite.
Symptoms/Injuries after Eye Contact:	Direct contact with liquefied gas may cause cold burns or frostbite and permanent eye damage.
Symptoms/Injuries after Ingestion:	Ingestion of this product is unlikely since liquefied petroleum gas is a gas at room temperature
Indication of Any Immediate Medical Attention and Special Treatment Needed	
Notes to Physician: Treat symptomatically.	

SECTION 5 – FIRE-FIGHTING MEASURES

Extinguishing Media:	Suitable: Small fires use CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Unsuitable: None known.
Conditions of Flammability:	EXTREMELY FLAMMABLE. Will release gases that form flammable mixtures at room temperature. Liquefied petroleum gas is heavier than air and may travel along the ground or be moved by ventilation to sources of ignition far removed from the source of liquefied petroleum gas.
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, smoke and irritating vapors may be formed on combustion.
Special Firefighting Procedures:	Wear self-contained breathing apparatus and protective clothing to prevent inhalation and contact with skin and eyes.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Extremely flammable. Ventilate area. Avoid using sources of ignition in release area. Wear protective equipment. Keep unprotected persons away.
Methods for Containment and Cleaning Up:	Prevent material from entering confined spaces. Stop or reduce leak if you can do so without risk. Isolate area until gas has dispersed.

SECTION 7 – HANDLING AND STORAGE

Handling	
Precautions for Safety Handling:	Extremely flammable. Avoid inhalation and contact with eyes and skin. Wash thoroughly after handling this product if in contact with skin.
Storage	Store in cool, dry and well-ventilated area. Protect from sunlight. Store away from incompatible and reactive materials (See Section 10). Store away from heat and sources of ignition.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	CAS Number	Exposure Limits
Liquefied petroleum gases	68476-86-8	NIOSH: (REL-TWA 10h) 1000 ppm (based on a similar material)

The selection of personal protective equipment varies, depending upon the conditions of use. Use equipment appropriate to your particular use pattern.

Engineering Measures:	For normal application, special ventilation is not necessary.
Eye Protection:	Not required under normal use conditions.
Hand Protection:	None necessary under normal use conditions.
Skin and Body Protection:	None necessary under normal use conditions.
Respiratory Protection:	None necessary under normal use conditions.

NIOSH = National Institute for Occupational Safety and Health
REL = Recommended Exposure Limit
TWA= Time-Weighted Average

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Physical State:	Liquefied gas – Clear colorless liquefied gas.
Odor:	Odorless or can have a light gas odor
Odor Threshold:	Not available
pH:	Not applicable
Melting Point:	Not applicable

Boiling Point:	-15 to 0°C (5 to 32°F)
Flash Point:	-90 to -73°C (-130 to -99.4°F) (Estimated)
Evaporation Rate:	Not available
Flammability:	Extremely flammable gas.
Flammable Limits in Air Lower (LFL): Upper (UFL):	 1.8% by volume 8.8% by volume
Vapor Pressure:	50 PSIG @ 70°F (21°C)
Vapor Density:	2 @ 60°F (15.6°C) (air =1)
Density/Specific Gravity:	0.56
Solubility in Water:	Very slightly soluble (0.008%)
Octanol/ Water Partition Coefficient:	Not available
Auto-ignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not applicable

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:	This product is stable under the normal conditions of use.
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	Will not undergo hazardous polymerization.
Conditions to Avoid:	Avoid heat sources, sparks or flames and static discharge.
Incompatible Materials:	Avoid strong oxidizing agents and acids.
Hazardous Decomposition Products:	None expected under the normal conditions of use.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Entry: Skin contact, Inhalation, Eye contact, Skin Absorption, Ingestion (in liquefied form)

Acute Toxicity

Product data:
Not available.

Ingredient data:

Chemical	CAS#	Route & Species	Value
Liquefied petroleum gas (LPG)	68476-86-8	No data available for LPG.	No data available for LPG.

Data for two of the components of LPG:	CAS#	Route & Species	Value
Isobutane	75-28-5	Inhalation, mouse (male) Inhalation, rat	LC_{50} 368,000 ppm (36.8%) (4h) LC_{50} >13,023 ppm (1.3%) (4h) LC_{50} 570,000 ppm (57%) (15 mins)*
Propane	74-98-6	Inhalation rat	LC_{50} >800,000 ppm (80%) (15 mins)*

**LC_{50} values obtained with 15-minute exposure durations cannot be reliably converted to 4-hour exposures.*

Eye Irritation:	Not expected to be an eye irritant. Contact with liquefied petroleum gas may cause cold burns or frostbite and permanent eye damage.
Skin Irritation:	Not expected to be a primary skin irritant. Contact with liquefied petroleum gas may cause cold burns or frostbite.
Ingestion Effects:	Not applicable. Not an expected route of entry.
Inhalation Effects:	No known significant effects or critical hazards.
Skin Sensitization:	Contact with this product is not expected to cause skin sensitization, based upon the available data and the known hazards of the components.
Respiratory Tract Sensitization:	Contact with this product is not expected to cause respiratory tract sensitization, based upon the available data and the known hazards of the components.
Chronic Toxicity	
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Reproductive Toxicity:	No known significant effects or critical hazards.
Teratogenicity/Embryotoxicity:	No known significant effects or critical hazards.
Other Chronic Effects:	Exposure to liquefied petroleum gas is not known to cause chronic toxic effects of sufficient severity to threaten life or cause serious impairment.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity:	Not Available
Persistence/ Degradability:	Not Available
Bioaccumulation:	Not Available
Mobility:	Not Available
Other Adverse Effects:	Not Available

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method:	In accordance with local and federal guidelines and regulations

SECTION 14 – TRANSPORT INFORMATION

	Shipping name	UN Number	Hazard Class	PG
DOT (US)	LIGHTERS	1057	2.1	--

DOT- Department of Transport

SECTION 15 – REGULATORY INFORMATION

OSHA Classification: (OSHA Hazard Communication Standard (29 CFR §1910.1200))

This product has been classified in accordance with the hazard criteria of the OSHA's HCS/HazCom 2012 and the SDS contains all the information required by the 29 CFR § 1910.1200.

Hazard Ratings

	NPCA/HMIS	NFPA 704
Health:	1	1
Flammability:	4	4
Reactivity:	0	0

NPCA/HMIS – National Paint and Coatings Association/ Hazardous Materials Identification System
NFPA – National Fire Protection Association

1. The components in this product are listed on the TSCA Inventory or are otherwise exempt from TSCA.
2. ASTM F2201-02 (Standard Consumer Safety Specification for Utility Lighters).
3. ASTM F400-10 (Standard Consumer Safety Specification for Lighters).
4. U.S. Safety Standard for Utility Lighters, 16 CFR Part 1212.
5. U.S. Safety Standard for Cigarette Lighters, 16 CFR Part 1210.

SECTION 16 – OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Preparation Date: January 8, 2015
Supersedes Date: April 18, 2016

Disclaimer: The information given is based on data currently available to us and is believed to be correct. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. No responsibility is assumed for injury or damage from the use of the products described herein.