

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) HF-12/HC12CRS
Aim'N'Flame Butane Lighter

*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

Manufacturer's Name Crow Marketing & Distribution, Inc.	Emergency Telephone Number 800-255-3924
Address (Number, Street, City, State, and ZIP Code) P. O. Box 29171, Dallas, TX 75229	Telephone Number for Information 972-241-3049
	Date Prepared 10-10-95 REVIEWED 12/01/99
	Signature of Preparer (Optional)

Section II -- Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
2-Methyl Propane, Isobutane Mixtures, UN1969, CAS 75-28-5	1000			97%
N-Butane				2%

HMIS INFORMATION

Health	1
Reactivity	0
Flammability	4

Section III -- Physical/Chemical Characteristics

Boiling Point	(-12°C)11°F	Specific Gravity (H ₂ O = 1)	N/A
Vapor Pressure (mm Hg.)	72 PSI	Melting Point	N/A
Vapor Density (AIR = 1)	2	Evaporation Rate (Butyl Acetate = 1)	Immediate

Solubility in Water
Slight

Appearance and Odor

Colorless liquid or invisible vapor with a faint, unpleasant odor (gasoline-like)

Section IV -- Fire and Explosion Hazard Data

Flash Point (Method Used) -117°F % Vol. in Air	Flammable Limits Based on Isobutane	LEL 1.8	UEL 8.4
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Extinguishing Media

Dry chemical, CO₂ and Halogenated extinguishing agents

Special Fire Fighting Procedures

Gas fires should not be extinguished unless the gas flow can be stopped immediately. Shut off gas source & allow fire to burn itself out. If source cannot be shut off immediately, all equipment & surfaces exposed to the fire should be cooled w/water to prevent over-heating, flash-backs or explosions. Control fire until gas supply is used up. Firemen should use protective equipment, including respiratory apparatus.

Unusual Fire and Explosion Hazards

Section V -- Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (*Materials to Avoid*)

N/A

Hazardous Decomposition or Byproducts

N/A

Hazardous Polymerization	May Occur		Conditions to Avoid Sparks, heat, open flame
	Will Not Occur	X	

Section VI -- Health Hazard Data

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
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Health Hazards (*Acute and Chronic*)

N/A

Carcinogenicity:	NTP? N/A	IARC Monographs? N/A	OSHA Regulated? N/A
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Signs and Symptoms of Exposure INHALATION: Oxygen deficient atmospheres may produce rapid breathing, headache, dizziness, visual disturbances, muscular weakness, tremors, narcosis, unconsciousness, & death, depending on concentration & duration of exposure. EYE: Direct contact with gas may produce severe & possibly permanent eye damage from freeze burns. SKIN: Non-irritating, but solid & liquid forms can cause freeze burns. INGESTION: Solid & liquid forms of this material & the pressurized gas can cause freeze burns.

Medical Conditions

Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures INHALATION: Immediately remove from contaminated area to fresh air. For respiratory distress, give air, oxygen, an/or administer cardiopulmonary resuscitation. Keep patient quiet & warm until medical care is obtained. EYES: Rinse immediately with water. Remove contact lenses. Flush eyes with water 10-15 minutes. If irritation persists, call physician. SKIN: Frozen tissue should be flooded or soaked with warm water. Cryogenic burns should be seen by a physician promptly. INGESTION: Rinse mouth with water. Drink 1-2 glasses of water or milk. Do not induce vomiting.

Section VII -- Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Waste Disposal Method

Dispose of contaminated product & materials in a manner approved for this material. Consult appropriate federal, state & local regulatory agencies to ascertain proper disposal procedures.

Precautions to Be Taken in Handling and Storing

Store in a cool, dry place. Keep away from heat, sparks and flames.

Other Precautions

Store in cool, dry place

Section VIII -- Control MeasuresRespiratory Protection (*Specific Type*)

For excessive gas concentrations, use only NIOSH/MSHA-approved, self-contained breathing apparatus.

Ventilation	Local Exhaust	Special
	Mechanical (<i>General</i>)	Other

Protective Gloves Rubber gloves & apron	Eye Protection Chemical goggles/face shield
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Other Protective Clothing or Equipment

Emergency eye wash fountains & safety showers for first aid treatment should be available.

Work/Hygienic Practices