Revision Date: 04/16/2012



1. IDENTITY

SMART FUEL

Lumina Inc (Manufacturer) 301 South Henry Street Stoneville, North Carolina 27048 For Information: +1 336.644.4192

Online Safety + Emergency Info
Chemical Name: www.luminaproducts.com/safety
Ethyl Alcohol (Denatured)

Preparation Date: 02/28/2012

Manufacturer's Code: SF Formula 8

Trade Name: SMART FUEL™ Bio-Ethanol Fuel

HMIS:

Health: 2 Flammability: 3 Reactivity: 0

Product Appearance and Odor: Clear, colorless liquid; antiseptic smell (astringent), odorless when burned.

2. INTENDED USE

Fuel for Indoor and Outdoor Ventless Fireplaces.

3. HAZARDOUS INGREDIENTS / INFORMATION ON INGREDIENTS

Occupational Exposure Limits

ACGIH ACGIH OSHA OSHA
INGREDIENT CAS # TLV TLV PEL PEL %
(TWA) (STEL) (TWA) (STEL)

Ethyl Alcohol 64-17-5 1000 PPM 1000 PPM > 90% Proprietary Ingredients Trade Secret 400 PPM 400 PPM < 10% Denatonium Benzoate 3734-33-6 None Established < 1%

Isopropyl Alcohol (IPA) 67-63-0 4.8% - 9.0%

4. FIRST AID PROCEDURES / NO KNOWN IRRITANTS

Eyes: Immediately flush affected area with plenty of cool water and continue for at least 15 minutes.

Remove and wash contaminated clothing before reuse. GET MEDICAL ATTENTION IMMEDIATELY.

Skin: Rinse exposed area well with water. If irritation occurs, consult a physician

Ingestion: If victim is conscious and able to swallow, have victim drink water or milk to dilute. Never give

anything by mouth if victim is unconscious or having convulsion. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. Induce vomiting only if advised by physician or Poison Control Center.

Inhalation: Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration,

preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

5. FIRE FIGHTING INFO

FLASH POINT: 58°F (14°C) TCC

70°F (21°C) TOC

NIOSH approved respirators should be worn. Use water spray to cool equipment and to disperse vapors. Alcohol flames may be difficult to see because they are virtually colorless. Vapors form from this product and may travel by air currents to an ignition source and flash back. Extinguishing Media: Water, carbon dioxide, "alcohol-type foam", or dry chemical.

6. ACCIDENTAL RELEASE MEASURES

Eliminate all source of ignition. Stop leak if without risk. Flush spill away with water spray.

Wear NIOSH approved respirator.

Personal Precautions: Ensure adequate ventilation. Avoid high pressure washing or generation of aerosols. Use personal protective

equipment.

Environmental Precautions: Prevent further leakage or spillage if safe to do so.

Cleanup Methods: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.







7. HANDLING & STORAGE

Handling Ensure adequate ventilation.

Storage Keep in a dry cool place. Reseal containers after opening. To maintain product quality, do not store in heat or

direct sunlight. Keep at temperatures not exceeding 104° F

Material is classified as a flammable liquid. Keep liquid and its vapors away from heat, sparks, open flame and ignition sources. Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be NO SMOKING areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, static electricity or other sources of ignition; they may explode and cause injury or death.

8. PHYSICAL CHARACTERISTICS

Boiling Point: 173°F Specific Gravity: 0.797@60 F/60 F Vapor Press@ 20C: 44.6 mm Hg
Volatile by Volume: 100% Vapor Density: 1.6 Odor: Characteristic

Solubility in Water: Complete Appearance: Colorless Evaporation Rate: 1

Consideration: Appearance & Odor can be modified by non-hazardous components of the mixture.

9. STABILITY & REACTIVITY

Stability: The product is stable.
Condition to Avoid: Heat, sparks, open flame.

Materials to avoid: Oxidizing materials can cause vigorous reaction

Hazardous Decomposition: None. However as with any other organic material, combustion will produce

carbon dioxide and possible carbon monoxide.

Hazardous Polymerization: Will Not Occur.

10. TOXICOLOGICAL INFORMATION

Overexposure maybe fatal if swallowed.

Harmful if inhaled or absorbed through the skin.

Causes skin, eye, and upper respiratory track infection.

Can cause central nervous system depression. Chronic Effects: Damage to liver, heart and kidneys.

11. ECOLOGICAL INFORMATION

Not Applicable

12. DISPOSAL INFORMATION

Vapors may collect in empty containers. Treat empty containers as hazardous.

Ensure compliance with federal, state, and local regulations.

Please recycle or manage materials to minimize waste whenever possible.

Waste Disposal Methods:Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.

Contaminated Packaging:

Empty containers should be decontaminated and taken for local recycling, recovery or waste disposal.

13. TRANSPORTATION INFORMATION

Ethanol (Denatured Alcohol), 3, UN1170, PGII

14. REGULATORY INFORMATION

SARA 145

15. ADDDITIONAL INFORMATION

Ensure compliance with federal, state, and local regulations.

The information provided herein is given in good faith, but no warranty, expressed or implied, is made.



