



MATERIAL SAFETY DATA SHEET

SECTION I – BASIC PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: LIGHTER FLUID / CHARCOAL STARTER

MANUFACTURER:

Royal Oak Enterprises, LLC.
1 Royal Oak Avenue
Roswell, GA 30076
(678) 461-3200

EMERGENCY PROCEDURES

Transportation Emergencies

Call CHEMTREC
(800) 424-9300

Health Emergencies

Call Los Angeles Poison Info Center
(323) 222-3212 (24 Hours)

SECTION II – OSHA-HAZARDOUS INGREDIENTS / EXPOSURE LIMITS

<u>INGREDIENT</u>	<u>CAS #</u>	<u>%</u>	<u>AGENCY</u>	<u>TYPE</u>	<u>VALUE</u>	<u>UNITS</u>
Petroleum Distillates*	8052-41-3	>98	OSHA	PEL	500	PPM
iso-alkanes C9-C11	68551-16-6		ACGIH	TWA	100	PPM
Hydrotreated Petrol. Distillates	64742-47-8		(above values apply to all names)			

* Generically, this ingredient can be described by many names and CAS numbers, some of which are listed here.

SECTION III – HEALTH HAZARDS / ROUTES OF ENTRY

EMERGENCY OVERVIEW: Product is a combustible liquid; keep away from fire, flames, sparks. If swallowed, can be aspirated into lungs and cause asphyxiation.

EYE CONTACT: This material may cause eye irritation. Direct contact with the liquid or exposure to its vapors or mists may cause burning, tearing and redness.

SKIN CONTACT: Not a principle route of entry, but may cause de-fatting of skin.

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INHALATION (BREATHING): Breathing high concentrations of vapors or mists may cause irritation of the nose, throat and respiratory tract. Signs of nervous system depression (e.g., drowsiness, dizziness, loss of coordination and fatigue) may occur. Respiratory symptoms associated with pre-existing lung disorders (e.g., asthma-like conditions) may be aggravated by exposure to this material.

INGESTION (SWALLOWING): Ingestion of excessive quantities may cause irritation of the digestive tract and / or nervous system depression (e.g., drowsiness, dizziness, loss of coordination and fatigue). Aspiration hazard – this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

SECTION IV – EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: For direct contact, flush the affected eye(s) with clean water for 15 minutes, holding the lids open. Seek medical attention immediately thereafter. If irritation or redness from exposure to vapors develops, move victim away from exposure and into fresh air. If irritation or redness persists, seek medical attention.

SKIN CONTACT: Remove contaminated clothing and launder thoroughly. Cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.

INHALATION (BREATHING): If irritation of nose or throat develops, move victim away from source of exposure and into fresh air. If irritation persists, seek medical attention. If victim is not breathing, artificial respiration should be administered. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION (SWALLOWING): CALL PHYSICIAN IMMEDIATELY. Aspiration Hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious, place on the left side with head down. If possible, do not leave unattended.

SECTION V – FIRE AND EXPLOSION INFORMATION

FLASH POINT	103° F / 39° C (TCC)
LOWER EXPLOSIVE LIMIT (% VOL.)	1.0
UPPER EXPLOSIVE LIMIT (% VOL.)	7.0

EXTINGUISHING MEDIA: Extinguish with dry chemical, CO₂ or a universal type foam.

FIRE & EXPLOSION HAZARDS: This material is combustible and may be ignited by heat or flame. This material will burn, but will not ignite readily. Vapors are heavier than air and can travel along the ground to an ignition source.

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FIRE FIGHTING PROCEDURES: The use of NIOSH-approved self-contained breathing apparatus and full protective clothing is recommended for fire fighters. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with any water used for cooling purposes.

SECTION VI - SPILL OR LEAK PROCEDURES

PRECAUTIONS IN CASE OF RELEASE OR SPILL: Stay upwind and away from spill. Keep all sources of ignition and hot metal surfaces away from spill. If spill is indoors, ventilate area of spill. A universal type foam may be used to suppress vapors. Keep out of drains, sewers or waterways. Use sand or other inert material to dam and contain spill. Do not flush area with water, product will float. For smaller spills, use absorbent material. Call spill response team for larger spills. Notify appropriate state / local agencies if applicable.

SECTION VII – STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS: Keep containers tightly closed. Keep containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. “Empty” containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death. “Empty” drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION VIII – PERSONAL PROTECTION INFORMATION

VENTILATION: If good general ventilation is not adequate for minimizing exposures, local ventilation may be required to keep exposures below PELs / TLVs. Where explosive mixtures may be present, systems safe for such locations should be used.

RESPIRATORY PROTECTION: The use of a NIOSH-approved respirator with Organic Vapor cartridge is required when concentrations exceed the established exposure limits (See Section II).

SKIN PROTECTION: The use of nitrile gloves is advised to prevent skin contact and possible irritation. Impervious clothing (chemical-resistant boots, chemical aprons, heavy-duty work shirt and pants) should be worn as needed.

EYE PROTECTION: Wear approved eye protection (chemical splash goggles) to safeguard against potential eye contact, irritation or injury.

SECTION IX - PHYSICAL DATA

BOILING POINT RANGE	~318-383°F / ~156-195°C
FLASH POINT RANGE	~103-112°F / ~39-44°C
VAPOR DENSITY (AIR = 1)	4.8
VAPOR PRESSURE	<5 mm Hg @ 100°F / 38°C
EVAPORATION RATE (N-BUTYL ACETATE = 1)	0.15
% VOLATILE	~100%
% SOLUBILITY IN WATER	Negligible
SPECIFIC GRAVITY	0.776 @ 60°F / 16°C
APPEARANCE	Transparent, ~colorless
ODOR	Characteristic hydrocarbon

SECTION X - REACTIVITY DATA

STABILITY: Stable under normal conditions.

INCOMPATIBILITY (MATERIAL TO AVOID): This product is incompatible with strong acids or bases, and most oxidizing agents. Avoid heat and flame.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and unidentified organic compounds may be formed during combustion.

HAZARDS POLYMERIZATION: Will not occur

SECTION XI – TOXICOLOGICAL INFORMATION

ORAL (rat): >30 g/kg
DERMAL (rat): >10 g/kg
INHALATION (rat): >1200 ppm (6 hrs)

Nothing in this product as provided is listed as a carcinogen by OSHA, NTP, ACGIH, or IARC.

SECTION XII – ECOLOGICAL INFORMATION

No Data.

SECTION XIII - DISPOSAL INFORMATION

Dispose of product in accordance with all local, state and federal regulations. If declared a waste, this product may be required to be handled under RCRA Hazardous Waste Code D001 (Ignitable).

SECTION XIV - TRANSPORTATION REQUIRMENTS

DOT: UN 1268, Petroleum Distillates, nos, (aliphatic hydrocarbons), 3, PG III

Note: Product is non-regulated (combustible liquid) for domestic ground shipments in containers of 119 gallons or less. [49 CFR 173.150 (f)]

IATA: UN 1268, Petroleum Distillates, nos, (aliphatic hydrocarbons), 3, PG III

IMDG: UN 1268, Petroleum Distillates, nos, (aliphatic hydrocarbons), 3, PG III, (39° C)

Note: Product is eligible for Limited Quantity shipments (mode and volume dependent).

SECTION XV – BASIC USA REGULATORY INFORMATION

SARA 302: Not an EHS; **SARA 312:** Fire; **SARA 313:** Not a TRI chemical or class;
RCRA: D001; **CERCLA:** Not a Hazardous Substance.
All components are listed on the TSCA inventory.

SECTION XVI – MISCELLANEOUS INFORMATION

<u>NFPA-704 HAZARD CODE</u>	<u>KEY</u>	<u>HMIS-III HAZARD CODE</u>
Health Hazard: 1	0 = Least	Health: 1
Flammability: 2	1 = Slight	Flammability: 2
Instability: 0	2 = Moderate	Physical Hazard: 0
Other: --	3 = High	PPE: X
	4 = Extreme	

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