

Material Safety Data Sheet

SECTION I - Material Identity
 SECTION II - Manufacturer's Information
 SECTION III - Physical/Chemical Characteristics
 SECTION IV - Fire and Explosion Hazard Data
 SECTION V - Reactivity Data
 SECTION VI - Health Hazard Data
 SECTION VII - Precautions for Safe Handling and Use
 SECTION VIII - Control Measures
 SECTION IX - Label Data
 SECTION X - Transportation Data
 SECTION XI - Site Specific/Reporting Information
 SECTION XII - Ingredients/Identity Information

SECTION I - Material Identity

Item Name	
Part Number/Trade Name	LIGHTER FLUID/CHARCOAL STARTER
National Stock Number	913000F036943
CAGE Code	ROYOK
Part Number Indicator	A
MSDS Number	181105
HAZ Code	B

SECTION II - Manufacturer's Information

Manufacturer Name	ROYAL OAK ENTERPRISES INC
P.O. Box	N/K
Street	900 ASHWOOD PARKWAY STE 800
City	ATLANTA
State	GA
Country	US
Zip Code	30338-5000
Emergency Phone	404-393-1430
Information Phone	404-393-1430

MSDS Preparer's Information

Street	900 ASHWOOD PARKWAY STE 800
City	ATLANTA
State	GA
Zip Code	30338-5000
Date MSDS Prepared/Revised	16JUN87
Date of Technical Review	17OCT94
Active Indicator	N

Alternate Vendors

Vendor #5 CAGE	BVSSB
----------------	-------

SECTION III - Physical/Chemical Characteristics

Appearance/Odor	CLEAR W/LITTLE, IF ANY, COLOR & A CHARACTERISTIC ODOR
Boiling Point	~318-383F
Melting Point	N/K
Vapor Pressure	2.6
Vapor Density	4.8
Specific Gravity	0.772
Decomposition Temperature	N/K
Evaporation Rate	(N-BU AC=1): 0.13
Solubility in Water	NEGLIGIBLE
Percent Volatiles by Volume	100
Chemical pH	N/K
Corrosion Rate	N/K
Container Pressure Code	4
Temperature Code	8
Product State Code	U

SECTION IV - Fire and Explosion Hazard Data

Flash Point Method	TCC
Lower Explosion Limit	0.7
Upper Explosion Limit	6
Extinguishing Media	DRY CHEMICAL, CO2, UNIVERSAL TYPE FOAM
Special Fire Fighting Procedures	USE SCBA. WATER SPRAY MAY BE USEFUL IN MINIMIZING VAPORS & COOLING CONTAINERS EXPOSED TO HEAT & FLAME. AVOID SPREADING BURNING LIQUID W/COOLING WATER
Unusual Fire/Explosion Hazards	THIS MATERIAL IS COMBUSTIBLE & MAY BE IGNITED BY HEAT/FLAME

SECTION V - Reactivity Data

Stability	YES
Stability Conditions to Avoid	HEAT, FLAME, SPARKS
Materials to Avoid	STRONG ACIDS/BASES, OXIDIZING AGENTS & SELECTED AMINES
Hazardous Decomposition Products	CO, CO2
Hazardous Polymerization	NO
Polymerization Conditions to Avoid	N/K

SECTION VI - Health Hazard Data

Route of Entry: Skin	NO
Route of Entry: Ingestion	YES
Route of Entry: Inhalation	YES
Health Hazards - Acute and Chronic	EYES/SKIN: IRRITATION. INHALATION: NOSE & THROAT IRRITATION, NERVOUS SYSTEM DEPRESSION. INGESTION: DIGESTIVE TRACT IRRITATION, NERVOUS SYSTEM DEPRESSION, ASPIRATION HAZARD LEADING TO LUNG DAMAGE. REPEATED & PROLONGED OVEREXPOSURE TO SOLVENTS ASSOCIATED W/PERMANENT BRAIN & NERVOUS SYSTEM DAMAGE

Carcinogenity: NTP	NO
Carcinogenity: IARC	NO
Carcinogenity: OSHA	NO
Explanation of Carcinogenity	NONE
Symptoms of Overexposure	IRRITATION, BURNING, TEARING, REDNESS, DRYING, CRACKING, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, FATIGUE, ASTHMA-LIKE CONDITIONS, INFLAMMATION
Medical Cond. Aggrevated by Exposure	LUNG & SKIN DISORDERS
Emergency/First Aid Procedures	EYES: MOVE TO FRESH AIR. FLUSH W/CLEAN WATER. SKIN: WASH THOROUGHLY W/MILD SOAP & WATER. INHALATION: MOVE TO FRESH AIR. GIVE CPR/OXYGEN IF NECESSARY. INGESTION: ASPIRATION HAZARD. DON'T INDUCE VOMITING/GIVE ANYTHING BY MOUTH. IF DROWSY/UNCONSCIOUS, PLACE ON THE LEFT SIDE W/THE HEAD DOWN. DON'T LEAVE UNATTENDED. OBTAIN MEDICAL ATTENTION IN ALL CASES

SECTION VII - Precautions for Safe Handling and Use

Steps if Material Released/Spilled	STAY UPWIND. REMOVE IGNITION SOURCES & HOT METAL SURFACES. VENTILATE. USE UNIVERSAL TYPE FOAM TO SUPPRESS VAPORS. KEEP OUT OF DRAINS, SEWERS/WATERWAYS. USE SAND/OTHER INERT MATERIAL TO DAM & CONTAIN. DON'T FLUSH W/WATER. SMALL: USE ABSORBENT PADS
Neutralizing Agent	N/K
Waste Disposal Method	DISPOSE OF IAW/FEDERAL, STATE & LOCAL REGULATIONS. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, BUNGED & SHIPPED TO SUPPLIER/RECONDITIONER. ALL OTHERS SOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER IAW/REGULATIONS. COMBUSTIBLE LIQUID
Handling and Storage Precautions	P CONTAINERS TIGHTLY CLOSED. KEEP COOL, DRY & AWAY FROM IGNITION SOURCES. AVOID INHALATION & PERSONAL CONTACT. EMPTY CONTAINERS CONTAIN RESIDUE. DO
Other Precautions	DON'T PRESSURIZE/CUT/WELD/BRAZE/SOLDER/GRIND/EXPOSE SUCH CONTAINERS TO HEAT/FLAME/SPARKS/OTHER IGNITION SOURCES. BEFORE WORKING ON/IN TANKS WHICH CONTAIN/HAVE CONTAINED THIS PRODUCT, REFER TO SAFETY, HEALTH & OTHER REGULATIONS

SECTION VIII - Control Measures

Respiratory Protection	USE A RESPIRATOR/GAS MASK W/CARTRIDGES & CANISTERS/SUPPLIED AIR EQUIPMENT APPROPRIATE TO AIRBORNE CONCENTRATIONS (NIOSH-APPROVED)
Ventilation	IF EXISTING VENTILATION ISN'T ADEQUATE ADDITIONAL EXPLOSION-PROOF VENTILATION/EXHAUST SYSTEMS MAY BE REQUIRED
Protective Gloves	IMPERMEABLE
Eye Protection	REQUIRED
Other Protective Equipment	CLEAN WATER SOURCE, IMPERVIOUS CLOTHING
Work Hygenic Practices	REMOVE & LAUNDER CONTAMINATED CLOTHING BEFORE REUSE
Supplemental Health/Safety Data	INTENTIONAL MISUSE BY CONCENTRATING & INHALING MAY BE HARMFUL/FATAL

SECTION IX - Label Data

Protect Eye	NO
Protect Skin	NO
Protect Respiratory	NO
Chronic Indicator	UNKNOWN
Contact Code	UNKNOWN
Fire Code	UNKNOWN
Health Code	UNKNOWN
React Code	UNKNOWN
Specific Hazard and Precaution	EYES/SKIN: IRRITATION. INHALATION: NOSE & THROAT IRRITATION, NERVOUS SYSTEM DEPRESSION. INGESTION: DIGESTIVE TRACT IRRITATION, NERVOUS SYSTEM DEPRESSION, ASPIRATION HAZARD LEADING TO LUNG DAMAGE. REPEATED & PROLONGED OVEREXPOSURE TO SOLVENTS ASSOCIATED W/PERMANENT BRAIN & NERVOUS SYSTEM DAMAGE. IRRITATION, BURNING, TEARING, REDNESS, DRYING, CRACKING, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, FATIGUE, ASTHMA-LIKE CONDITIONS, INFLAMMATION

SECTION X - Transportation Data

Container Quantity	32
Unit of Measure	OZF

SECTION XI - Site Specific/Reporting Information

SECTION XII - Ingredients/Identity Information

Ingredient #	01
Ingredient Name	STODDARD SOLVENT (PETROLEUM DISTILLATE), MINERAL SPIRITS
CAS Number	8052413
NIOSH Number	WJ8925000
Proprietary	NO
Percent	N/K
OSHA PEL	500 PPM
ACGIH TLV	100 PPM
Recommended Limit	525 MG/CUM
