

MATERIAL SAFETY DATA SHEET



1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: SUNDEX 840

Manufacturer Information:

Holly Refining & Marketing – Tulsa LLC
1700 South Union
Tulsa, Oklahoma 74107

DISTRIBUTED BY
R. E. CARROLL, INC.
1570 NORTH OLDEN AVENUE
TRENTON, NJ 08638-3204
609-695-6211 / 800-257-9365

Product Use:

Process Oil

Emergency Phone Numbers:

Chemtrec	(800) 424-9300
Holly Refining & Marketing – Tulsa LLC	(918) 594-6000
FAX	(918) 594-6909

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount (Vol%)
LIGHT PARAFFINIC PETROLEUM OIL SOLVENT EXTRACT	64742-05-8	100 - 100

EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIMITS)

	CAS No.	Governing Body	Exposure Limits		
Limit for the product	64742-05-8	Holly	TWA	0.2	mg/m3
LIGHT PARAFFINIC DISTILLATE SOLVENT EXTRACT	64742-05-8	Holly	TWA	0.2	mg/m3

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Caution! May cause skin irritation. Heated material may cause injury. May be absorbed through the skin in harmful amounts. May produce toxic reproductive, liver, thymus, bone marrow and blood (anemia) effects. Cancer hazard.

Hazards Ratings:

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>PPI</u>
NFPA	2	1	0	
HMIS	2	1	0	X

POTENTIAL HEALTH EFFECTS

PRE-EXISTING MEDICAL CONDITIONS

The following diseases or disorders may be aggravated by exposure to this product: skin, eye, liver, respiratory system, lung (asthma-like conditions),

- **INHALATION**

Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Prolonged or repeated exposure may cause adverse health effects.

LC50 (mg/l): no data

LC50 (mg/m3): no data

LC50 (ppm): no data

- **SKIN**

Moderately irritating to the skin. Contact with heated product may cause thermal burns. May cause light sensitivity which appears as a skin rash when exposed to sunlight. May be absorbed through the skin in harmful amounts. May produce toxic reproductive, liver, thymus, bone marrow and blood (anemia) effects. May produce skin tumors upon prolonged and repeated contact in the absence of good personal hygiene. Studies have shown that thorough removal of this oil from the skin can prevent these toxic effects. See Section 15 for additional information.

Draize Skin Score: no data Out of 8.0

LD50 (mg/kg): no data

- **EYES**

May cause slight irritation. Contact with product at elevated temperatures can result in thermal burns.

- **INGESTION**

May produce toxic reproductive, liver, thymus, bone marrow and blood (anemia) effects. See Section 15 for additional information.

LD50 (g/kg): no data

4. FIRST AID MEASURES

- **INHALATION**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and continue to monitor. Get immediate medical attention.

- **SKIN**

Wash with soap and water for 20 minutes. Get medical attention if irritation develops or persists. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other leather products. For contact with heated product, flush immediately with plenty of cool water for at least 20 minutes. Get medical attention.

- **EYES**

Flush eye with water for 20 minutes. Get medical attention. For contact with heated product, flush immediately with plenty of cool water for at least 20 minutes. Get medical attention.

- **INGESTION**

If swallowed, immediately contact a physician or Poison Control Center. Never give anything by mouth to an intoxicated, unconscious or convulsing person. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA**

The following media may be used to extinguish a fire involving this material: Water spray; Regular foam; Dry chemical; Carbon dioxide;

- **FIRE FIGHTING INSTRUCTIONS**

Wear structural fire fighting gear. The use of fresh air equipment such as Self Contained Breathing Apparatus (SCBA) or Supplied Air Respirators should be worn for fire fighting if exposure or potential exposure to products of combustion is expected. Application of water or foam may cause frothing. Do not direct solid streams into the hot burning liquid.

FLAMMABLE PROPERTIES

	Typical	Minimum	Maximum	Text Result	Units	Method
Flash Point		325			F	COC
Autoignition Temperature				755 estimated	F	N/A
Lower Explosion Limit				no data	%	N/A
Upper Explosion Limit				no data	%	N/A

6. ACCIDENTAL RELEASE MEASURES

Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required. In Canada, advise the Ministry of the Environment, if required. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Vacuum or sweep up material and place in a disposal container.

7. HANDLING AND STORAGE

• HANDLING

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Follow all MSDS/label precautions even after container is emptied because it may retain product residue. "Empty" containers retain product 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, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioned, or properly disposed of.

• STORAGE

NFPA class IIIB storage. Flash point is greater than 200 degrees F. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult With a Health and Safety Professional for Specific Selections

• ENGINEERING CONTROLS

Use with adequate ventilation. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

• PERSONAL PROTECTION

▪ EYE PROTECTION

Splash proof chemical goggles are recommended to protect against the splash of product.

▪ GLOVES OR HAND PROTECTION

Protective gloves are recommended to protect against contact with product. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Polyvinyl chloride (PVC); Neoprene; Nitrile; Polyvinyl alcohol; Viton;

▪ RESPIRATORY PROTECTION

Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Respiratory protection is not usually needed unless product is heated or misted.. Half-mask air purifying respirator with combination organic vapor and HEPA filter cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with combination organic vapor and HEPA filter cartridges is acceptable for exposures to fifty (50) times the exposure limit. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressuredemand full-face supplied air respirator with escape bottle or SCBA. Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

▪ **OTHER**

The following materials are acceptable for use as protective clothing: Polyvinyl alcohol (PVA); Polyvinyl chloride (PVC); Neoprene; Nitrile; Viton; Polyurethane; Remove contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Property	Typical	Units	Text Result	Reference
Appearance		N/A	DARK VISCOUS FLUID	
Boiling Point		F	no data	
Bulk Density		lb/gal	no data	
Melting Point		F	no data	
Molecular Weight	278	g/mole	no data	
Octanol/Water Coefficient		N/A	no data	
pH		N/A	no data	
Specific Gravity	0.96	N/A		
Solubility in Water		wt%	NIL	
Odor		N/A	SLIGHT ODOR	
Odor Threshold		ppm	no data	
Vapor Pressure		mmHg	<0.0001	@ 20 C
Viscosity (F)	118	SUS		@ 100F
Viscosity (C)	22.3	CsT		@ 40C
% Volatile		wt %	NIL	

10. STABILITY AND REACTIVITY

- **STABILITY**
Stable.
- **CONDITIONS TO AVOID**
Avoid heat, sparks and open flame.
- **INCOMPATIBILITY**
The following materials are incompatible with this product: Strong oxidizers
- **HAZARDOUS DECOMPOSITION PRODUCTS**
Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.
- **HAZARDOUS POLYMERIZATION**
Will not polymerize.

11. ECOLOGICAL INFORMATION

No data available

12. DISPOSAL CONSIDERATIONS

Follow federal, state and local regulations. This material is not a RCRA hazardous waste, if not contaminated. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

13. TRANSPORT INFORMATION

Governing Body **Mode** **Proper Shipping Name**

<u>Governing Body</u>	<u>Mode</u>	<u>Hazard Class</u>	<u>UN/NA No.</u>	<u>Label</u>
DOT	Ground	Not Regulated	N/A	Not Regulated

14. REGULATORY INFORMATION

<u>Regulatory List</u>	<u>Component</u>	<u>CAS No.</u>
Inventory - Australia (AICS)	SUNDEX 840	64742-05-8
Inventory - Canada - Domestic Substances List	SUNDEX 840	64742-05-8
Inventory - China	SUNDEX 840	64742-05-8
Inventory - European EINECS Inventory	SUNDEX 840	64742-05-8
Inventory - Korea - Existing and Evaluated	SUNDEX 840	64742-05-8
Inventory - Philippines Inventory (PICCS)	SUNDEX 840	64742-05-8
Inventory - TSCA - Sect. 8(b) Inventory	SUNDEX 840	64742-05-8
Massachusetts - Right To Know List	SUNDEX 840	64742-05-8
Inventory - Australia (AICS)	LIGHT PARAFFINIC PETROLEUM OIL SOLVENT EXTRACT	64742-05-8
Inventory - Canada - Domestic Substances List	LIGHT PARAFFINIC PETROLEUM OIL SOLVENT EXTRACT	64742-05-8
Inventory - China	LIGHT PARAFFINIC PETROLEUM OIL SOLVENT EXTRACT	64742-05-8
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Inventory - Korea - Existing and Evaluated	LIGHT PARAFFINIC PETROLEUM OIL SOLVENT EXTRACT	64742-05-8
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Title III Classifications Sections 311, 312:

- Acute: **YES**
- Chronic: **YES**
- Fire: **YES**
- Reactivity: **NO**
- Sudden Release of Pressure: **NO**

15. OTHER INFORMATION

Warning! The International Agency for Research on Cancer classifies this type of petroleum oil as carcinogenic. Prolonged and repeated lifetime skin contact with similar oils has produced skin tumors in laboratory animals. Oral and skin exposure to similar oils has produced toxic liver, thymus, bone marrow, blood (anemia) effects and death in laboratory animals. Oral and skin exposure of pregnant animals to similar oils has injured or been lethal to the unborn. Avoid contact with skin. If contact is unavoidable, wear oil-impervious protective gear. In case of skin contact, promptly wash thoroughly with soap and water. Clothing soaked with this oil should be removed and laundered before reuse. Oil-soaked shoes should be destroyed. Minimize exposure to mist. Wear approved respiratory protection if average airborne mist exposure exceeds Holly's Recommended Occupational Exposure Limit of 0.2 milligrams per cubic meter of air for an 8-hour Time Weighted Average for Polynuclear Aromatic Hydrocarbons. WHMIS Classification: Class D Division 2A. ADDITIONAL REGULATORY INFORMATION: This product contains SARA 313 (Toxic Release Chemicals) polycyclic aromatic compounds at approximately 0.1%.