

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

| Product Name: | SUNPAR 107 |
|---------------------------|---|
| Manufacturer Information: | Holly Refining & Marketing – Tulsa LLC 1700 South Union Tulsa, Oklahoma 74107 |
| 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%) |
|---|------------|---------------|
| SEVERELY SOLVENT REFINED HEAVY PARAFFINIC | 64741-89-5 | 100 - 100 |
| PETROLEUM OIL | | |

EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIMITS)

CAS No. Governing Body Exposure Limits

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Danger! Harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and produce damage.

Hazards Ratings:

| Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme | | | | | |
|---|---------------|-------------|-------------------|------------|--|
| | <u>Health</u> | <u>Fire</u> | Reactivity | <u>PPI</u> | |
| NFPA | 1 | 1 | 0 | | |
| HMIS | 1 | 1 | 0 | Х | |

POTENTIAL HEALTH EFFECTS

PRE-EXISTING MEDICAL CONDITIONS

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

INHALATION

High vapor concentrations are irritating to the eyes, nose, throat, and lungs.

| LC50 (mg/l): | no data |
|---------------|---------|
| LC50 (mg/m3): | no data |
| LC50 (ppm): | no data |

• SKIN

Practically non-toxic if absorbed through the skin. May cause skin irritation.

Draize Skin Score:no dataout of 8.0LD50 (mg/kg):no data

EYES

Non-irritating to the eyes.

INGESTION

Practically non-toxic if ingested. Product may be harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and produce damage.

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. Wash clothing before reuse.

• EYES

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

INGESTION

Do not induce vomiting! Do not give liquids! Get medical attention immediately.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA Water spray; Regular foam; Dry chemical; Carbon dioxide;

• FIRE FIGHTING INSTRUCTIONS

Wear structural fire fighting gear.

FLAMMABLE PROPERTIES

| | Typical | Minimum | Maximum | Text Result | Units | Method |
|--------------------------|---------|---------|---------|--------------------|-------|--------|
| Flash Point | | | | 345 MINIMUM COC | F | N/A |
| Autoignition Temperature | | | | 650 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. 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 breathing (dust, vapor, mist, gas). Wash thoroughly after handling.

STORAGE

Store in a cool dry place. NFPA class IIIB storage. Flash point is greater than 200 degrees F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult With a Health and Safety Professional for Specific Selections

ENGINEERING CONTROLS

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use with adequate ventilation.

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 when prolonged skin contact cannot be avoided. 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 dust / mist filters or HEPA filter cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with dust / mist filters or HEPA filters or HEPA filter cartridges is acceptable for exposures to fifty (50) times the exposure limit.

OTHER

Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required. 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. For non-fire emergencies, respiratory protection may be necessary and wear appropriate protective clothing to avoid contact with material.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical Property | Typical | Units | Text Result | Reference |
|------------------------------|---------|--------|-----------------|-----------|
| Appearance | | N/A | COLORLESS FLUID | |
| Boiling Point | | F | no data | |
| Bulk Density | | lb/gal | no data | |
| Melting Point | | F | no data | |
| Molecular Weight | | g/mole | no data | |
| Octanol/Water Coefficient | | N/A | no data | |
| рН | | N/A | no data | |
| Specific Gravity | 0.85 | N/A | | |
| Solubility in Water | | wt% | NIL | |
| Odor | | N/A | LITTLE ODOR | |
| Odor Threshold | | ppm | no data | |
| Vapor Pressure | 0.0008 | mmHg | | @ 20 C |

| Viscosity (F) | 62 | SUS | | @ 100F |
|---------------|------|------|-----|--------|
| Viscosity (C) | 10.2 | CsT | | @ 40 C |
| % Volatile | | wt % | NIL | |

10. STABILITY AND REACTIVITY

STABILITY

Stable.

- **CONDITIONS TO AVOID** Avoid heat, sparks and open flame.
- INCOMPATIBILITY
 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. This material is expected to be toxic to aquatic organisms.

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 | | |
|----------------|--------|-----------------|-----------|---------------|--|
| DOT | Ground | Not Regulated | | | |
| Governing Body | Mode | Hazard Class | UN/NA No. | Label | |
| DOT | Ground | N/A | N/A | Not Regulated | |

14. REGULATORY INFORMATION

| Regulatory List | Component | CAS No. |
|---|--|------------|
| Inventory - Canada - Domestic Substances List | SUNPAR 107 JX | 64741-89-5 |
| Inventory - China | SUNPAR 107 JX | 64741-89-5 |
| Inventory - European EINECS Inventory | SUNPAR 107 JX | 64741-89-5 |
| Inventory - Japan - (ENCS) | SUNPAR 107 JX | 64741-89-5 |
| Inventory - Philippines Inventory (PICCS) | SUNPAR 107 JX | 64741-89-5 |
| Inventory - TSCA - Sect. 8(b) Inventory | SUNPAR 107 JX | 64741-89-5 |
| Massachusetts - Right To Know List | SUNPAR 107 JX | 64741-89-5 |
| Inventory - Australia (AICS) | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
| Inventory - Canada - Domestic Substances List | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
| Inventory - China | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |

| Inventory - European EINECS Inventory | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
|--|--|------------|
| Inventory - Japan - (ENCS) | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
| Inventory - Korea - Existing and Evaluated | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
| Inventory - Philippines Inventory (PICCS) | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
| Inventory - TSCA - Sect. 8(b) Inventory | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |
| Massachusetts - Right To Know List | SEVERELY SOLVENT REFINED LIGHT PARAFFINIC PETROLEUM OIL | 64741-89-5 |

Title III Classifications Sections 311, 312:

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

15. OTHER INFORMATION

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. WHMIS Classification: not controlled. Please refer to the material safety data sheet for complete information. Limits for the product- 5mg/m3, Oil Mist Limit, (OSHA PEL/ACGIH TLV).