



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: IRM 901

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: ASTM 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 PETROLEUM OIL	64741-88-4	30 - 70
SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4	30 - 70

EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIMITS)

CAS No.	Governing Body	Exposure Limits

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Warning! Heated material may cause injury.

Hazards Ratings:

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

	Health	Fire	Reactivity	PPI
NFPA	0	1	0	
HMIS	0	1	0	X

POTENTIAL HEALTH EFFECTS

PRE-EXISTING MEDICAL CONDITIONS

The following diseases or disorders may be aggravated by exposure to this product: Skin.

INHALATION

No acute effects expected.

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

- **SKIN**

Practically non-toxic if absorbed through the skin. Substance may cause slight skin irritation. Contact with heated product may cause thermal burns.

Draize Skin Score: no data out of 8.0

LD50 (mg/kg): no data

- **EYES**

Contact with product at elevated temperatures can result in thermal burns.

- **INGESTION**

Practically non-toxic if ingested.

LD50 (g/kg): no data

4. FIRST AID MEASURES

- **INHALATION**

Remove to fresh air.

- **SKIN**

Wash clothing before reuse. Wash with soap and water. For contact with heated product, flush immediately with plenty of cool water for at least 20 minutes. Get medical attention.

- **EYES**

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists. For contact with heated product, flush immediately with plenty of cool water for at least 20 minutes. Get medical attention.

- **INGESTION**

Material is practically non-toxic. Induction of vomiting is not required. 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. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

FLAMMABLE PROPERTIES

	Typical	Minimum	Maximum	Text Result	Units	Method
Flash Point				469 MINIMUM	F	COC
Autoignition Temperature				no data	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**

Wash thoroughly after handling.

- **STORAGE**

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**

Ventilation is normally required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Mechanical ventilation recommended.

- **PERSONAL PROTECTION**

- **EYE PROTECTION**

Safety glasses (with side shields) recommended. Splash proof chemical goggles are recommended to protect

- **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. Neoprene; Nitrile; 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 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 pressure-demand 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**

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: Neoprene; Nitrile; Viton; Polyurethane; Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

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	DARK LIQUID	
Boiling Point		F	no data	
Bulk Density		lb/gal	no data	
Melting Point		F	no data	
Molecular Weight		g/mole	609	
Octanol/Water Coefficient		N/A	no data	
pH		N/A	no data	
Specific Gravity	0.882	N/A		
Solubility in Water		wt%	no data	

Odor		N/A	no data	
Odor Threshold		ppm	no data	
Vapor Pressure		mmHg	NIL	
Viscosity (F)	1226	SUS	@ 100 F	
Viscosity (C)	231	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.

12. DISPOSAL CONSIDERATIONS

Follow federal, state and local regulations. This material is not a RCRA hazardous waste, if not contaminated. If material has been "used", RCRA criteria (ignitability, reactivity, corrosivity and toxicity) must be determined. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

13. TRANSPORT INFORMATION

<u>Governing Body</u>	<u>Mode</u>	<u>Proper Shipping Name</u>
DOT	Ground	Not Regulated

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

14. REGULATORY INFORMATION

<u>Regulatory List</u>	<u>Component</u>	<u>CAS No.</u>
Inventory - Australia (AICS)	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4
Inventory - Australia (AICS)	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4
Inventory - Canada - Domestic Substances List	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4

Inventory - Canada - Domestic Substances List	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4
Inventory - China	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4
Inventory - China	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4
Inventory - European EINECS Inventory	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4
Inventory - European EINECS Inventory	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4
Inventory - Korea - Existing and Evaluated	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4
Inventory - Korea - Existing and Evaluated	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4
Inventory - Philippines Inventory (PICCS)	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4
Inventory - Philippines Inventory (PICCS)	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4
Inventory - TSCA - Sect. 8(b) Inventory	SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL	64741-88-4
Inventory - TSCA - Sect. 8(b) Inventory	SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4

Title III Classifications Sections 311, 312:

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

15. OTHER INFORMATION

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