ULVAC R-4

Material Safety Data Sheet
Revision Date January 2008
For Chemical Emergency Call Chemtrex 800-424-9300

1. Substance/Company Identification

PRODUCT NAME: **ULVAC R-4 Rotary Vacuum Pump Oil**
CAS NUMBER: 64742-65-0
DISTRIBUTOR: ULVAC Technologies, Inc
401 Griffin Brook Drive
Methuen, MA 01844
(978) 686-7550

2. Composition/ Ingredients

GENERIC NAME: 100% Solvent refined Neutral paraffinic oil
CHEMICAL FORMULA: $(CH_2)_n$ $20 =< n =< 40$
HAZARDOUS INGREDIENTS: None

3. Hazards Identification

POSSIBLE ENTRY ROUTES: Ingestion, inhalation of oil mists
This product is not classified as hazardous.
ACUTE EFFECTS: Exposure to oils mists may cause nausea and eye irritation. Detailed studies have not been made, but material is not expected to be dermatitic or a sensitizer.
CHRONIC EFFECTS: Unknown.

4. First Aid Measures

SKIN: Wash with soap and water.
EYES: Flush with water. Contact a physician!
INGESTION: If swallowed, do not induce vomiting.
Contact a physician. Small amounts in mouth may be washed out.

5. Fire Fighting Measures

FLASH POINT: 213 C
METHOD USED: Cleveland Open Cup
EXPLOSIVE LIMITS LOWER: Unknown UPPER: Unknown
EXTINGUISHING MEDIA: Water fog, chemical foam or carbon dioxide. NFPA Class III B Material.
SPECIAL FIREFIGHTING PROCEDURES: Wear breathing gear when fighting fires in enclosed spaces; incomplete combustion of this material produces carbon monoxide!
UNUSUAL FIRE AND/OR EXPLOSION HAZARDS: None

6. Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN EVENT OF RELEASE: Small spills may be wiped up with a rag. Large spills should be picked up immediately with an absorbent.

7. Handling and Storage

HANDLING: None known
STORAGE: None known

8. Exposure Controls/Personal Protection

ENGINEERING CONTROL MEASURES: None required
RESPIRATORY PROTECTION: See notes on ventilation below.
PROTECTIVE GLOVES: Yes - made of oil-impermeable rubber
SAFETY GLASSES/GOGGLES: Yes - glasses should have side shields
OTHER PROTECTIVE EQUIPMENT: None should be required under normal use.

9. Physical & Chemical Properties

PHYSICAL STATE: Liquid
VAPOR PRESSURE: < $5x10^{-3}$ Torr @ 25C
BOILING POINT: >200 C
EVAPORATION RATE (ether = 1): Nil
VAPOR DENSITY: approximately 14
WT % VOLATILES: Nil
SPECIFIC GRAVITY: 0.87
VISCOSITY: 52 cst @ 40 C
SOLUBILITY IN WATER: Nil
APPEARANCE: Pale yellow viscous liquid with a faint petroleum odor.

10. Stability & Reactivity

STABILITY: Material is stable
CONDITIONS TO AVOID: Continuous exposure to temperatures > 200 C
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion may produce carbon monoxide.

11. Toxicological Information

ACUTE ORAL LD50(MG/KG): None known
ACUTE DERMAL LD50: None
ACUTE INHALATION: US Gov't 8 hr TWA limit for exposure to oil mists is 5 mg per cubic meter

12. Ecological Information

ENVIRONMENTAL: When used and/or disposed of as indicated, no adverse environmental effects are foreseen.
MOBILITY: Non-volatile and insoluble in water.
DEGRADABILITY: Slowly biodegradable in aerobic conditions.

13. Disposal Considerations

Product and packaging must be disposed of in accordance with Federal, State and local regulations.

14. Transport Classification

Not classified as hazardous for transport by air, sea or road.

15. Regulatory Information

None

16. Other Information

NFPA RATING

FLAMMABILITY	1
HEALTH HAZARD	0
REACTIVITY	0
SPECIAL HAZARD	NONE