



ULVAC Technologies, Inc.

1. Product and Company Identification

PRODUCT NAME: **ULVAC R-4**
MATERIAL USES: Lubricating Oil
COMPANY: Inland Vacuum Industries
35 Howard Ave
Churchville NY 14428
(585) 293-3330
VALIDATION DATE: 1/15/2013

2. Hazards Identification

Physical State: Bright oily liquid
Odor: Petroleum
OSHA/HCS Status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency Overview: Caution – May cause eye and skin irritation. Prolonged or repeated contact may dry skin and cause irritation. Harmful or fatal if swallowed. Can enter lungs and cause damage.
Slightly irritating to the eyes and skin. Defatting to the skin. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not ingest. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects
Inhalation: No known significant effects or critical hazards.
Ingestion: Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin: Slightly irritating to the skin.
Eyes: Slightly irritating to the eyes.

Potential chronic health effects
Chronic effects: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Over-exposure signs/symptoms
Inhalation: No specific data.
Ingestion: Adverse symptoms may include the following: nausea or vomiting
Skin: Adverse symptoms may include the following: irritation, redness, dryness, Cracking
Eyes: Adverse symptoms may include the following: irritation, watering, redness
Medical conditions: None known
Aggravated by over-exposure
See toxicological information (section 11)

3. Composition/Information on Ingredients

United States <u>Chemical Name</u>	<u>CAS number</u>	<u>%</u>
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	>99

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye Contact: Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin Contact: Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product: May be combustible at high temperature.
- Extinguishing media
- | | |
|---------------|--|
| Suitable: | Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Not Suitable; | None known |
- Hazardous thermal decomposition products: No specific data
- Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up
- | | |
|--------------|--|
| Small spill: | Stop leak if without risk. Move containers from spill area. Dispose of via a licensed waste disposal contractor. |
| Large spill: | Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. |

7. Handling and storage

- Handling: Put on personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section

10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

Personal protection

Eyes: Safety glasses

Skin: Lab coat

Respiratory: A respirator is not needed under normal and intended conditions of use

Hands: Natural rubber (latex)

Personal protective equipment (pictograms)



HMIS Code/Personal protective equipment: B

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state:	Bright oily liquid
Flash Point:	213°C
Vapor pressure:	<.0001 Torr @25°C
Boiling point:	112°C @ .01 torr
Viscosity:	52 cSt @ 40°C
Solubility in water:	Nil
Appearance:	Clear to straw yellow viscous liquid with faint petroleum odor.

10. Stability and reactivity

Stability:	The product is stable
Hazardous polymerization:	Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid:	No specific data
Materials to avoid:	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
Base Oil	Rabbit	>2 g/kg	LD50 Dermal	-
	Rat	>5 g/kg	LD50 Oral	-
Inhalation:	No known significant effects or critical hazards.			
Ingestion:	Aspiration hazard if swallowed. Can enter lungs and cause damage			
Skin:	Slightly irritating to the skin			
Eyes:	Slightly irritating to the eyes			

12. Ecological information

Environmental effects: No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to section 7: Handling and storage and section 8: Exposure controls/personal protection for additional handling information and protection of employees.

14. Transport information

AERG: Not applicable
 Regulatory information
 DOT/IMDG/IATA: Not regulated

15. Regulatory information

United States
 HCS Classification; Not regulated
 U.S. Federal regulations: United States Inventory (TSCA 8b): All components are listed or exempted. SARA 302/304/311/312 extremely hazardous substance: No products were Found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found.
 State regulations: Connecticut Carcinogen Reporting: None of the components are listed. Connecticut Hazardous Material Survey: None of the components are listed. Florida substance: None of the components are listed. Illinois Chemical Safety Act: None of the components are listed. Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed. Louisiana Reporting: None of the components are listed. Louisiana Spill: None of the components are listed. Massachusetts Spill: None of the components are listed.

Michigan Critical Material: None of the components are listed.
 Minnesota Hazardous Substances: None of the components are listed.
 New Jersey Hazardous Substances: None of the components are listed.
 New Jersey Spill: None of the components are listed.
 New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
 New York Acutely Hazardous Substances: None of the components are listed.
 New York Toxic Chemical Release Reporting: None of the components are listed.
 Pennsylvania RTK Hazardous Substances: None of the components are listed.
 Rhode Island Hazardous Substances: None of the components are listed.
 No products were found

California Prop. 65:
 International regulations
 International lists:

This product, (and it ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16. Other information

Label requirements: May cause eye and skin irritation. Prolonged or repeated cont may dry skin and cause irritation. Harmful or fatal if swallowed. Can enter lungs and cause damage.

Hazardous Material Information System (U.S.A.);

Health	1
Fire hazard	1
Physical Hazard	0
Personal protection	B

HAZARD RATINGS

4- Extreme
 3- Serious
 2- Moderate
 1- Slight
 0- Minimal
 See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.
 National Fire Protection Association (U.S.A.):



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