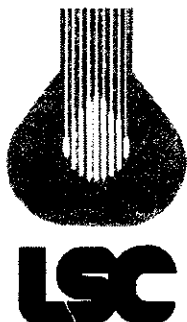


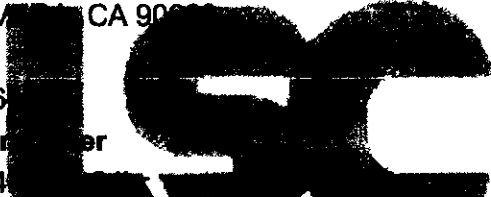
**Safety Data Sheet
R & O Ind Oil ISO 220**



**Product Number:
Revision Date:**

**33224-5
08/28/2018**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier** R & O Ind Oil ISO 220
Product Code 33224
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use See Technical Data Sheet.
- 1.3. Details of the supplier of the safety data sheet**
- Manufacturer** LUBRICATING SPECIALTIES
COMPANY
8015 PARAMOUNT BLVD.
PICO RIVERA, CA 90071
- Telephone No.** (562) 776-1111
- 1.4. Emergency telephone number**
(800) 424-4444
- 

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Not Classified

PDS: R: 0220
17 - Ind/Hud.

Rec.
1/24/19

2.2. Label elements

Using the Toxicity Data listed in section 11 & 12 the product is labeled as follows.

Not Classified

HMIS	Health:	0	NFPA	Health:	0
	Fire:	1		Fire:	1
	Physical Hazards:	0		Reactivity:	0
	PPE:	C		Special Hazards:	--

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

SECTION 3: Composition/Information on ingredients

Ingredient/Chemical Designations	Weight %	EC No. 1272/2008 / GHS Classification
Residual oils (petroleum), solvent dewaxed CAS Number: 0064742-62-7	<60	Not Classified
PETROLEUM DISTILLATES, HEAVY TREATMENT PARAFFIN CAS Number: 0064742-54-1		Asp. Tox. 1;H304

*The full texts of the phrases shown

SECTION 4: First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation

If inhaled, remove person to fresh air and keep comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. If unconscious, place in the recovery position and seek medical attention immediately.

Skin

In case of contact, immediately rinse skin with plenty of water. Remove contaminated clothing and shoes. If skin irritation occurs, seek medical attention. Launder contaminated clothing before reuse.

Eye

In case of contact, immediately rinse eyes with plenty of fresh, clean water for at least 15 minutes. Remove contact lenses if present and continue rinsing. Seek medical attention immediately.

Ingestion

Do not induce vomiting. Call a physician or emergency medical facility immediately.

4.2. Most important symptoms and effects, both acute and delayed

No data available

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Use Carbon dioxide (CO₂), dry chemical, or foam to extinguish flames.

5.2. Special hazards arising from the substance or mixture

Hazardous Decomposition Products: May be an

5.3. Advice for fire-fighters

Self-contained full-face positive pressure breathing apparatus (SCBA) should be used. Water can be used to cool and protect exposed material. Do not allow water and contaminants from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled material. Use suitable personal protective equipment. Ventilate area if spilled in confined space or other poorly ventilated areas. Evacuate personnel to safe areas. Keep unnecessary personnel away.

6.2. Environmental precautions

Prevent entry into sewers and waterways. Report spills as required to appropriate authorities in accordance with all applicable regulations.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or water courses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

Dispose of in accordance with all federal, state, and local environmental regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling

Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing vapor. Use with adequate ventilation.

In Storage

Store in a dry location at room temperature.

Keep this container and vapors from the container away from heat and flame. Keep container closed and maintain all original markings and labels.

7.2. Conditions for safe storage, including incompatibilities

Keep away from strong oxidizing and reducing agents.

CAUTION!!! Do not use cutting tools on the container when empty. Do not reuse container. Containers, even those that have been emptied will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

7.3. Specific end use(s)

There are no exposure scenarios, see details in section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The following occupational exposure limits have been established.

CAS Number	Ingredient	Source	Value
0064742-54-7	PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0064742-62-7	Residual oils (petroleum), solvent dewaxed	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³ OSHA PEL and 10 mg/m³ ACGIH.

Carcinogen Data

CAS No.	Ingredient	Source	Value
0064742-54-7	PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN	OSHA	Select Carcinogen: No
		IARC	Group 1: No; Group 2A: No; Group 2B: No; Group 3: No; Group 4: No;
0064742-62-7	Residual oils (petroleum), solvent dewaxed	OSHA	Select Carcinogen: No
		IARC	Group 1: No; Group 2A: No; Group 2B: No; Group 3: No; Group 4: No;

DNEL/PNEC values

No Data Available

8.2. Exposure controls

No special requirements under normal use and with adequate ventilation.



Eye/face protection

Wear safety glasses. If potential for splash or mist exists, wear chemical goggles or face shield.

Skin protection

Wear chemical resistant gloves. Gloves should be inspected before each use and discarded if they show tears, pinholes, or signs of wear.

Other

Gloves, overalls, apron, boots, or other suitable protective garments should be worn to minimize contact based on the task being performed.

Respiratory protection

Use NIOSH/OSHA approved respirator where high vapor concentrations are present.

Thermal hazards

No Data Available

SECTION 9: Physical and chemical properties

Appearance	AMBER OILY LIQUID
Odor	Petroleum Odor
Odor threshold	Not Determined
pH	Not Determined
Melting point / freezing point (C)	Not Determined
Initial boiling point and boiling range (C)	Not Measured
Flash point (C)	200
Evaporation rate (H20 = 1)	Not Determined
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	
Lower Explosive Limit:	Not Determined
Upper Explosive Limit:	Not Determined
Vapor pressure (Pa)	Not Determined
Vapor density	Lighter than air.
Relative density	0.804
Solubility(ies)	Not Determined
Partition coefficient n-octanol/water	Not Determined
Auto-ignition temperature (C)	Not Determined
Decomposition temperature	Not Determined
Viscosity (cSt)	
@ 100 C	Not Measured
@ 40 C	Not Measured
Pour point temperature (C)	Not Determined
Volatile Organic Compounds	nil
SADT	Not Determined

The data listed above are typical physical and chemical properties that do not constitute product specification.

9.2. Other information

DMSO extract by IP346: Less than 3.0 wt % (mineral oil component only)

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Material is normally stable at ambient temperature and pressure.

10.3. Possibility of hazardous reactions

May react with: oxidizing agents.

10.4. Conditions to avoid

High temperature, sparks, and open flames.

10.5. Incompatible materials

Keep away from strong oxidizing and reducing agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products: May form CO and CO2.

SECTION 11: Toxicological information

Acute toxicity

The preparation has been assessed using Acute Toxicity Data listed below, and classified for toxicological hazards according to the GHS criteria.

A large, bold, black logo consisting of the letters 'L', 'S', and 'C' in a stylized, rounded font. The 'L' and 'S' are connected at the top, and the 'C' is positioned to the right of the 'S'.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapor LD50, mg/L/4hr
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN - (0064742-54-7)	>5,000, Rat	>5,000, Rabbit	Not Available
Residual oils (petroleum), solvent dewaxed - (0064742-62-7)	Not Available	Not Available	Not Available

Classification	Category	Hazard Description
Acute toxicity (oral)	Not Classified	Not Applicable
Acute toxicity (dermal)	Not Classified	Not Applicable
Acute toxicity (inhalation)	Not Classified	Not Applicable
Skin corrosion/irritation	Not Classified	Not Applicable
Serious eye damage/irritation	Not Classified	Not Applicable
Respiratory sensitization	Not Classified	Not Applicable
Skin sensitization	Not Classified	Not Applicable
Germ cell mutagenicity	Not Classified	Not Applicable
Carcinogenicity	Not Classified	Not Applicable
Reproductive toxicity	Not Classified	Not Applicable
STOT-single exposure	Not Classified	Not Applicable
STOT-repeated exposure	Not Classified	Not Applicable
Aspiration hazard	Not Classified	Not Applicable

SECTION 12: Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment

Aquatic Ecotoxicity

Ingredient	Fish,	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Residual oils (petroleum), solvent (0064742-62-7)	Not Available	Not Available	Not Available
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN - (0064742-54-7)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Consult federal, state and local regulations regarding disposal methods, recycle used oil. Do not contaminate used oil with solvents or other chemicals.

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not regulated

14.3. Transport hazard class(es)

US DOT Label

Not regulated

ADR/RID

Not regulated

IMDG Not regulated

Sub Class Not applicable

ICAO/IATA

Not regulated

14.4. Packing group

Not applicable

14.5. Environmental hazards

ADR/RID Environmentally Hazardous: No - Not regulated

IMDG Marine Pollutant: No - Not regulated



14.6. Special precautions for user

No further information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

The above transport information is provided to assist in the proper classification of this product and may not be suitable for all shipping conditions. Shipping description may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. For information specific to your situation, consult your company's Hazardous Materials/Dangerous Goods expert.

SECTION 15: Regulatory information

National Legislation

United States:

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory or are not required to be listed on the TSCA Inventory.

SARA 311/312 (>0.1%): Not applicable

SARA 313 (>0.1%): Not applicable

CERCLA (>0.1%): Not applicable

Inventory - Canada - Non-Domestic Substances List (NDSL): Not applicable

California Proposition 65 Cancer:

Cumene

Ethyl benzene

Naphthalene



California Proposition 65 Developmental:

California Proposition 65 Female Reproductive: Not applicable

California Proposition 65 Male Reproductive: Not applicable

Inventory - Australia - Inventory of Chemical Substances (AICS):

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN

Residual oils (petroleum), solvent dewaxed

**Inventory - Japan Existing and
New Chemical Substances
(ENCS):**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN ()

**Korean Existing Chemicals
Inventory:**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN

**Inventory of Existing Chemical
Substances in China:**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN

**Philippines Inventory of
Chemicals and Chemical
Substances (PICCS) :**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN

Residual oils (petroleum), solvent dewaxed

**Taiwan List of Toxic Chemical
Substances regulated under
Toxic Chemical Substances
Control Act :** Not applicable

**EU REACH: Annex XVII,
Dangerous Substances and
Preparations:**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN

Residual oils (petroleum), solvent dewaxed

**Inventory - European Union
European Inventory of Existing
Commercial Chemical
Substances (EINECS):**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFIN (265-157-1)

Residual oils (petroleum), solvent dewaxed (265-166-0)

**EU List of Notified Chemical
Substances (ELINCS):** Not applicable

Risk Phrases

Not Classified.

SECTION 16: Other information

This information has been compiled from sources considered to be dependable and is accurate to the best of Lubricating Specialties Company knowledge. Lubricating Specialties Company makes no warranty whatsoever, expressed or implied, of MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, regarding the accuracy of such data or the results to be obtained from the use thereof. Lubricating Specialties Company assumes no responsibility for injury to recipient or third persons, or for any damage to any property and recipient assumes all such risks.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed

H304 May be fatal if swallowed and enters airways

H314 Causes severe skin burns and eye damage

End of document

The logo for Lubricating Specialties Company (LSC) is displayed in a large, bold, black, sans-serif font. The letters are thick and blocky, with a slightly distressed or textured appearance. The 'L' is on the left, followed by the 'S' and the 'C' on the right.