



Rando HD 46

1. Chemical & Company Identification

trade name: Rando HD 46

product code: 520211

supplier: Caltex Lubricants Vietnam Limited
Hanoi Branch
40 – Cat Linh
Hanoi
Vietnam

routine inquiries: 84-4-37332545

fax: 84-4-37332555

chemical description: Hydraulic Oil

2. Composition & Ingredients

components	cas no.	range in %
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Solvent dewaxed heavy paraffinic distillate	64742650	> 85
Solvent dewaxed residual oil	64742627	< 15
Additives which may include extreme pressure agent, detergent-dispersant, pour point depressant, antifoam and antiwear agent	Not Available	< 1

3. Hazards Identification

warning statements:

NO SIGNIFICANT HAZARD.

eyes:

Expected to cause no more than minor eye irritation characterized by tearing or a burning sensation.

oral:

If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

inhalation:

Breathing the vapour or mist may cause respiratory irritation, discomfort, or other pulmonary effects.

skin:

Expected to cause no more than minor skin irritation.

Prolonged or frequently repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from the defatting action of this material.

May cause skin discolouration following prolonged or repeated contact.

long term toxic effects:

The base oil component(s) are not expected to be carcinogenic based on IARC criteria. This product has not been tested as a whole for chronic health effects.

See Section 11 for additional information.

4. First Aid Measures

- eyes:** Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open.
- If irritation persists, see a doctor.
- skin:** Wash skin thoroughly with soap and water.
- Launder contaminated clothing.
- If skin irritation persists or a rash develops as a result of excessive contact, see a doctor.
- ingestion:** If swallowed and person is conscious, give water or milk. **DO NOT** make person vomit except on advice of medical personnel. **If** advice cannot be obtained, take person with container and label to nearest emergency treatment center. **Never** give anything by mouth to an unconscious person.
- inhalation:** If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. **If** any of these effects continue, see a doctor.
- advice to doctor:** High-pressure equipment can cause small, often bloodless, puncture wounds where material may have been injected deep into the extremity. Within 24 hours, there is usually extensive swelling, discoloration and intense pain in the affected part. Requires immediate treatment at a surgical emergency centre; else disfigurement or amputation of the affected part may occur.
- Treatment of high pressure wounds may include: 1) surgical decompression, debridement, and drainage. 2) broad-spectrum antibiotic and 3) anti-inflammatory medication. See Shoo, M.J., et al. High pressure injection injuries of the hand. *J. Trauma*, 20:229-238,

1980.

5. Fire Fighting Measures

ignition temp. (degrees c):	Not Determined
flammable limits (% by volume):	Not Determined
flash point (degrees c):	> 210 (COC)
fire extinguishing agents:	According to the U.S. National Fire Protection Association Guide, use water fog, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for persons attempting to stop the leak.
explosion hazards:	For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency.

6. Accidental Release Measures

in case of spill:	Stop the source of the leak or release and contain spill if possible. Ventilate area. Use respirator and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable
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container. Prevent contamination of groundwater or surface water.

7. Handling & Storage

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimised. Water contamination should be avoided.

Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

8. Exposure Control/Personal Protection

- eyes:** No special eye protection is usually necessary.
- Safety glasses, chemical type goggles, or face shield appropriate where splashing or misting is expected during routine operations or spill clean-up.
- skin:** Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.
- inhalation:** Respiratory protection is normally not required. However, if operating conditions create airborne concentrations that are excessive and may exceed the recommended exposure standard(s), the use of an approved respirator is recommended.

Wear approved respiratory protection such as a toxic dust, mist and fume respirator.

ventilation: Use adequate ventilation to keep the airborne concentrations of this material below the ACGIH TLV for mineral oil mists. Local exhaust ventilation and/or enclosure of the process is preferred in these cases.

exposure limits: The ACGIH TLV for mineral oil mists is 5 mg/m³ for a daily 8-hour exposure. A short term exposure limit (STEL) of 10 mg/m³ is recommended.

9. Physical & Chemical Properties

note: The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.

appearance & odor: Yellowish brown liquid; mild odor

boiling point (deg. c): Not Determined

vapor pr. (mmhg @ 25 deg. c): Not Determined

density (kg/l at 15 deg. c): 0.85 - 0.95

vapor density (air = 1): Not Determined

ph of undiluted product: Not Applicable

solubility (water): Negligible

percent volatile by volume: Not Determined

evaporation: Not Determined

viscosity (all product grades): 30 - 69 cP @ 40 deg. C

10. Stability & Reactivity

hazardous polymerizations:	DO NOT OCCUR
products of combustion:	Carbon monoxide, carbon dioxide, and aldehydes and ketones, combustion products of nitrogen or sulfur.
conditions to avoid:	Strong oxidizers such as chlorates, nitrates, peroxides, etc.

11. Toxicological Information

general: This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, hydrocracking and hydrotreating. These oils have not been listed in the U.S. National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic or probably carcinogenic to humans.

High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part. Take this information with you if you seek medical treatment.

12. Ecological Information

environmental effects:

No specific ecotoxicity data on this product are available.

This material may present environmental risks common to oil spills.

13. Disposal Considerations

waste disposal:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

remarks:

This material may present environmental risks common to oil spills. Contact your local oil spill response group and applicable government agencies if a spill occurs.

14. Transport Information

transport of dangerous goods:

UN Number: Not Applicable

Dangerous Goods Class: Not Applicable

Proper Shipping Name: Not Applicable

Hazchem Code (Australia/NZ): Not Applicable

Additional Information: None Determined.

15. Regulatory Information

respirator information: Where local approval authority is absent, respirator users can refer to U.S. NIOSH, European Standard EU-149, or joint Australia-New Zealand AS/NZS 1715/1716 for guidance.

Respirator users in Australia and New Zealand should comply with AS/NZS 1715/1716.

16. Other Information

No specific notes on this product.

To the best of our knowledge, the information provided in this MSDS document is correct. Access to this information is being provided via the Internet so that it can be made available to as many potential users as possible. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution. Customers are encouraged to review this information, follow precautions, and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user.

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