



Safety Data Sheet (SDS)

Product Name : Rored HDA 80W-90
Revision : 0
Validation Date : October 18th, 2019
Valid Period : 5 (five) years

PT Pertamina Lubricants
Oil Centre Building 5th-7th floor
Jl. MH Thamrin, Kavling 55
Central Jakarta 10350 Indonesia

**LEMBAR DATA KESELAMATAN
(SAFETY DATA SHEET)**

1. Identification

- Product identification/name : Rored HDA 80W-90
- Identification number : -
- Recommended use of the chemical and restrictions on use : Rored HDA 80W-90 is high performance gear oil suitable for lubricating hypoid type gear wheel or spiral bevel at transmission axle and steering box..
- Manufacturer's details : **PT Pertamina Lubricants**
Oil Centre Building 5th-7th floor
Jl. MH Thamrin, Kavling 55
Jakarta Pusat 10350 Indonesia
T : +62 21 3190 7190
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- Emergency phone number : (021) 1 500 000

2. Hazard Identification

- Classification of the product : Skin irritation/corrosion, category 1.
- GHS label elements : Exclamation mark
- Signal word : Warning
- Hazard statement(s) :
Physical hazard
No hazard statement

Health hazard
H317 - May cause an allergic skin reaction

Environmental hazard
No hazard statement
- Precautionary statement(s) :
General
No precautionary statement

Preventive
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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2. Hazard Identification

Response

- P302 + P352 – IF ON SKIN: Gently wash with plenty of soap and water.
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P321 - Specific treatment (see on GHS label).

Storage

No precautionary statement

Disposal

P501 - Dispose of contents/container to waste collector conform to regulations

- Pictogram :



- Other hazards which do not result in classification : May cause slightly skin irritation if contacted repeatedly through skin and not classified as combustible liquid but will be burn

3. Composition/Information on the Ingredients

- Chemical identity : Hydrocarbon petroleum and additive
- Common/trade name/synonym : Rored HDA 80W-90
- Mixtures

Chemical Ingredients	CAS Number	% wt as product
Alkenyl Amine	Confidential	0.25-0.495%

4. First Aid Measures

- Description of necessary first aid measure:
 - Eye contact : Rinse with plenty of water. If irritation occurs, refer to a physician.
 - Skin Contact : Wash the contaminated skin with water and soap. Remove the clothes. Get medical advice if further irritation occurs immediately. Wash the contaminated clothing before reuse.
 - Inhalation : Remove victim to fresh air and keep at rest in a comfortable position for breathing.
 - Ingestion : Do not give anything through mouth that can induce nausea or vomiting. Get medical advice if emergency condition occurs.
- Most important symptoms/effects (acute and delayed):
 - No data

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4. First Aid Measures

- Indication of immediate medical attention and special treatment needed:
 - No data

5. Fire-fighting Measures

- Suitable extinguishing media : Carbon dioxide, water, foam, and dry chemical
- Specific hazards arising from the chemical
Other hazardous combustion products : No other hazardous combustion
- Flash point °C : 218 (ASTM D-92)
- Hazardous chemical decomposition : No data available
- Special protective actions for fire fighters :
 - a. Dry Chemical
Spray to the origin of fire in the same direction with the wind.
 - b. Foam
If fire is in a container, spray the foam to inner wall of the container and not to the ignited liquid in the same direction with the wind. If it is spill, spray to the origin of fire in the same direction with wind until all the fire covered. Do not dispose the spill to the drainage, sewage system, and clean water source (drinking water).
- Special protective equipment : If fire occurs in limited/indoor/closed area, fire fighter operator must wear Self-Contained Breathing Apparatus (SCBA).

6. Accidental Release Measures

- Personal precautions, protective equipment, and emergency procedures
Keep away from fire sources. Avoid direct contact with skin, eye, and clothes (see section 8).
- Environmental precautions
Prevent oil spill goes into drainage, sewage system, and soil.
- Procedures
Report spill according to the valid system and procedures. If spill is estimated can goes into drainage or streams, do immediate report to the authority.
- Methods and materials for containment and cleaning up
Do oil spill control with oil spill kit (absorbents: sawdust, sorbent pad/pillow, etc, and other fire retardant material). Clean and dispose cleaned material in the right

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6. Accidental Release Measures

waste disposal.

7. Handling and Storage

- Preventive procedure for safe handling
- Precautions for safe handling
Do not get in eyes, skin, and clothes. See section 8 for personal protective equipment suggestions when handling this product. Do not inhale vapor from hot material, wash after use. Avoid release/spill.
- Conditions for safe storage (including any incompatibilities)
Store in closed and labeled container. Keep away from oxidizer, hot material, or combustible materials. Store at temperatures not exceeding 50 Celsius degrees.
- Recommended/compatible packaging material
Use mild carbon steel or high density polyethylene for container or container coating.
- Other information/advice
Container made from polyethylene cannot be exposed to high temperature because it is able to change the shape.

8. Exposure Controls and Personal Protection

- Control parameters
 - Exposure limits : No data available
 - Biological limit value : No data available
- Appropriate engineering controls :
 - Ventilation : In common condition, special ventilation requirement is not needed
- Individual protection measures (such as personal protective equipment) :
 - Respiratory protection : In common condition, no special requirements needed.
 - Eye protection : Use eye protective equipment (chemical goggles dan face shield) if material heated.
 - Hand protection : In common condition, no special requirement needed. If there is hand contact probability, use standardized and relevant gloves (e.g: EN374, US: F739) which has been agreed and made from

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<p>Skin and body protection</p> <ul style="list-style-type: none"> • Hygiene Practices : <ul style="list-style-type: none"> - No data 	<p>proven material that can give protection from the chemical, neophrene or neophrene rubber gloves or nitrile.</p> <p>: In normal condition, no special work clothing (without coverall) for skin or other body protection.</p>
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9. Physical and Chemical Properties

SAE Number	: 80W-90	
Specific Weight, 15°C, Kg/l	: 0.8965	(ASTM D-4052)
Appearance (physical state, color, etc)	: L 2.0	(ASTM D-1500)
Odor	: No data available	
Odor threshold	: No data available	
pH	: No data available	
Pour point, °C	: -21	(ASTM D-5950)
Initial boiling point and boiling range	: No data available	
Flammable properties (solid, gas)	: No data available	
Flash point (COC), °C	: 218	(ASTM D-92)
Evaporation rate	: No data available	
Flammability (solid, gas)	: Low	
Lower/upper flammability and/or explosive limits	: No data available	
Vapor pressure	: No data available	
Vapor density	: No data available	
Relative density	: No data available	
Solubility		
- Water solubility	: No data available	
- Other solvent solubility	: No data available	
Partition coefficient: n-octanol/water	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Kinematic viscosity at 40°C, cSt	: 142.3	(ASTM D-445)

10. Stability and reactivity

<ul style="list-style-type: none"> • Chemical stability and reactivity 	: Stable for normal use and under normal condition
<ul style="list-style-type: none"> • Possibility of hazardous reactions 	: No data available
<ul style="list-style-type: none"> • Condition to avoid 	: Temperature above normal condition
<ul style="list-style-type: none"> • Incompatible materials 	: Strong oxides, strong acid and base.
<ul style="list-style-type: none"> • Hazardous decomposition products 	: No data available

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11. Toxicological Information

- Acute toxicity
 - Skin corrosion/irritation : No data available. Suspected to cause mild irritation based on test to similar material and component.
 - Serious eye damage/irritation : No data available. It is not expected to cause serious irritation based on test to similar material and component.
 - Respiratory/skin sensitization : No data available. It is expected that inhaling material fog or vapor after heating will cause irritation and upper respiratory problem.
 - Germ cell mutagenicity : No data available. It is expected that it is not mutagen based on test to the components.
 - Carcinogenicity : No data available. It is expected that it is not carcinogen based on test to the components.
 - Reproductive toxicity : No data available. It is expected that it is not reproductive toxicant based on test to the components.
 - Systemic Target Organ Toxicity-single exposure : No data available. It is expected that it does not cause organ damage because of single exposure.
 - Systemic Target Organ Toxicity-repeated exposure : No data available. It is expected that it does not cause organ damage because of long term or repeated exposure based on test to the components.
 - Aspiration hazard : No data available. It is expected that it does not give aspiration risk based on its materials physical-chemical properties
 - Information on the likely routes of exposure : No data available
- Symptoms related to the physical, chemical, and toxicological characteristics : No data available
- Delayed and immediate effects and also chronic effects from short and long term exposure : No data available
- Numerical measures of toxicity : No data available
- Interactive effects
- Where specific chemical data are not available : No data available
- Mixtures : No data available
- Mixture versus ingredient : No data available

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11. Toxicological Information

information

- Other information No data available

12. Ecological Information

- Ecotoxicity :
Materials – There is no data that indicated to be harmful to aquatic organism. But expected, soil seepage may cause soil water contamination or aquifer. No potential to cause air pollution and ozone layer damage.
- Persistence and degradability :
Biodegradation:
Lubricant base component – Suspected has biodegradation properties
- Bioaccumulative potential
This product is estimated that will not accumulate biologically through food chain in the environment.
- Mobility in soil :
Lubricant base component – Low solubility, floating, and suspected can move from water to land. It is also suspected that will crack to sedimentation and wastewater particle.
- Other adverse effect : No data

**Information given is based on available material data, material component data, and similar material data.*

13. Disposal Considerations

- Disposal Methods
 - Product Disposal
Lubricant waste may not dispose with domestic waste and must be manage according to the valid government regulation. As alternative, the waste disposal can be done by authorized third party.
 - Packaging/container Disposal
Two-hundred nine (209) capacity drum must be in empty condition, labeled, and returns to the supplier or authorized party that have license to do recondition drum waste. Uncontaminated metal and plastic packaging can be recycled if possible, or disposed as domestic waste.

14. Transport Information

- ICAO/IATA 1

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14. Transport Information

UN Number	: Not regulated
UN Proper Shipping Name	: Not regulated
Transport Hazard class(es)	: Not regulated
Packing Group (if applicable)	: Not regulated
Environmental Hazards	: Not regulated
Special Precautions for User	: Not regulated
• ICAO/IATA II	
UN Number	: Not regulated
UN Proper Shipping Name	: Not regulated
Transport Hazard class(es)	: Not regulated
Packing Group (if applicable)	: Not regulated
Environmental Hazards	: Not regulated
Special Precautions for User	: Not regulated
• IMDG	
UN Number	: Not regulated
UN Proper Shipping Name	: Not regulated
Transport Hazard class(es)	: Not regulated
Packing Group (if applicable)	: Not regulated
Environmental Hazards	: Not regulated
Special Precautions for User	: Not regulated
• US DOT Non Bulk	
UN Number	: Not regulated
UN Proper Shipping Name	: Not regulated
Transport Hazard class(es)	: Not regulated
Packing Group (if applicable)	: Not regulated
Environmental Hazards	: Not regulated
Special Precautions for User	: Not regulated

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14. Transport Information

- USCG Compatibilty
 - UN Number : Not regulated
 - UN Proper Shipping Name : Not regulated
 - Transport Hazard class(es) : Not regulated
 - Packing Group (if applicable) : Not regulated
 - Environmental Hazards : Not regulated
 - Special Precautions for User : Not regulated
- Canada
 - UN Number : Not regulated
 - UN Proper Shipping Name : Not regulated
 - Transport Hazard class(es) : Not regulated
 - Packing Group (if applicable) : Not regulated
 - Environmental Hazards : Not regulated
 - Special Precautions for User : Not regulated
- Mexico
 - UN Number : Not regulated
 - UN Proper Shipping Name : Not regulated
 - Transport Hazard class(es) : Not regulated
 - Packing Group (if applicable) : Not regulated
 - Environmental Hazards : Not regulated
 - Special Precautions for User : Not regulated
- Indonesia
 - UN Number : Not regulated
 - UN Proper Shipping Name : Not regulated
 - Transport Hazard class(es) : Not regulated
 - Packing Group (if applicable) : Not regulated
 - Environmental Hazards : Not regulated

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14. Transport Information

Special Precautions for User : Not regulated

15. Regulatory information*

- Safety, health, and environmental regulations specific for the product in question :
 - Peraturan Menteri Perindustrian Nomor 23/M-IND/PER/4/2013 tentang Perubahan Atas Peraturan Menteri Perindustrian Nomor 87/M-IND/PER/9/2009 Tentang Sistem Harmonisasi Global Klasifikasi dan Label pada Bahan Kimia
 - Peraturan Pemerintah Republik Indonesia, Nomor 74 Tahun 2001 Tentang Pengelolaan Bahan Berbahaya dan Beracun Presiden Republik Indonesia
 - Keputusan Menteri Tenaga Kerja No Kep-187/Men/1999 tentang Pengendalian Bahan Kimia Berbahaya

16. Other information

- SDS validation date : October 18th, 2019
- SDS revision date : October 18th, 2019
- Revision explanation : Adjusted to Peraturan Menteri Perindustrian Nomor 23 Tahun 2013 tentang Perubahan Atas Peraturan Menteri Perindustrian Nomor 87/M-IND/PER/9/2009 tentang Sistem Harmonisasi Global Klasifikasi dan Label pada Bahan Kimia
- Key/legend to abbreviations and acronyms used in SDS :
 - SDS – Safety Data Sheet
 - CAS – Chemical Abstracts Service (unique identity number for substance and mixture)
 - SAE number – Society of Automotive Engineers (code used for viscosity specification of lubricant)
 - ASTM – American Standard Testing and Material
 - UN Number – United Nations Number (used for transportation classification)
 - ICAO/IATA – International Civil Aviation Organization/International Air Transport Association
 - IMDG – International Maritime Dangerous Goods
 - USCG Compatibility – US Coast Guard Compatibility (classification of chemical contained cargo which transported with ship)
- Key literature references and sources for data used to compile the SDS : No data

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16. Other information

- Further information :
 - Data in this SDS is available only for material/product above (Rored HDA 80W-90).
 - It is not applicable for particular process which is not suggested or mixed with other materials.
 - The risk of this product condition and compatibility for other use, which is not guaranteed by the company, is borne to the user. Precaution sign and handling procedure of this product must be obtained by user and staff who use the product.
 - Do not change or revise this document except with legal approval.

GENERAL NOTES

FOOT NOTE

Additional information: This document contains important information to ensure product storage, handling, and application will be done safely.

Revised parts: revised parts of this document is underlined and italic.

Application: this product cannot be used for other application besides recommendation in section 1 without any suggestion from the supplier.

SDS distribution: information in this document must be obtained and accessed by anyone who handles the product

Terms and Conditions: this information is made based on actual knowledge and intended to describe the product for health, safety, and environment requirements. Therefore, it cannot be interpreted for particular material guarantee of the product.

Label

Rored HDA 80W-90

(Heavy Duty Gear Oil)

PT Pertamina Lubricants

Oil Centre Building 5th-7th floor

Jl. MH Thamrin, Kavling 55

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www.pertaminalubricants.com



Warning
Peringatan

Pernyataan Bahaya

Dapat menyebabkan reaksi alergi pada kulit

Pencegahan:

Hindari menghirup debu/fume/gas/mist/uap/semprotan.

Pakaian kerja yang terkontaminasi tidak diperbolehkan berada di luar tempat kerja

Gunakan sarung tangan pelindung /pakaian pelindung /pelindung mata/pelindung wajah

Jika terjadi iritasi kulit atau ruam kulit: Dapatkan anjuran /perhatian medis

JIKA TERKENA KULIT: Cuci dengan banyak sabun dan air

Lepaskan pakaian yang terkontaminasi dan cuci sebelum dipakai kembali.

Serahkan oli dan kemasan bekas ke pengelola limbah sesuai peraturan yang berlaku.

Gunakan Safety Data Sheet sebagai acuan untuk informasi lebih lanjut

Hazard Statement

May cause an allergic skin reaction

Precautions:

Avoid breathing dust /fume/ gas/ mist/ vapours/ spray
Contaminated work clothing, should not be allowed out of the workplace

Wear protective gloves / protective clothing/ eye protection / face protection

If skin irritation or rash occurs, Get medical advice / attention

If on skin: wash with plenty of water;

Take off contaminated clothing and wash before use;

Dispose of contents/ container to waste collector conform to regulations

Refer to Safety Data Sheet for additional information