Safety Data Sheet (SDS)

1. PRODUCT AND COMPANY IDENTIFICATION

: Shell RIMULA R3 L Extra 15W-40 **Material Name**

Recommended Use 4 stroke diesel engine oil. **Restricted Use** : Other than those above. Manufacturer/Supplier : Shell Lubricants Japan K.K.

> 1-11-1 Marunouchi, Chiyoda-ku, Tokyo, 100-6212 Japan : Tel.0120-064-315/Fax.0120-264-315(customer service center)

Effective Date: May 1, 2022

Telephone/Fax **Emergency Telephone Number** : same as above. (Japanese office hours only) **Contact for Safety Data Sheet** https://shell-lubes.co.jp/contact/ (website)

SDS Code : 001J7720

2. HAZARDS IDENTIFICATION

GHS Classification : NOT HAZARDOUS

GHS Label Elements

Symbol(s) : No symbol Signal Words : No signal word

Hazard Statement : Not classified under GHS criteria.

GHS Precautionary Statements

: No precautionary phrases. Prevention Response : No precautionary phrases. : No precautionary phrases. Storage Disposal No precautionary phrases.

Unclassified Hazard: Please see Section 4 - 8 before use for Prevention/Response/Storage/Disposal.

Information Used oil may contain harmful impurities.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture : Mixture

Chemical Description : Lubricating oil.

Component Information : Lubricant base oil 80-90%

Additives 10-20%

: Not possible to define. **Chemical Formula**

CAS registry number Trade secret

Additional Information The highly refined mineral oil contains <3% DMSO-extract, according to IP346.

Pollutant Release and Transfer : Not applicable

Register (PRTR) Law **Industrial Safety and Health**

: Labeling(Delivery of Documents): Mineral oil 90-100%

Law

Poisonous and Deleterious : Not applicable

Substance Control Law

Classification of components

according to GHS

: [Chemical Identity/Hazard Class (category)/Hazard Statement/Conc.] Calcium alkyl salicylate/phenolate/Skin Sens. 1, Aquatic Chronic

Delivery of Documents: Molybdenum and its compounds <1%

4/H317,H413/0.1-<1%

Alkylphenol/Skin Corr. 1C, Eye Dam. 1, Repr. 1B, Aquatic Acute 1, Aquatic

Chronic 1/H314,H318,H360F,H400,H410/0.1-<0.3%

The specific chemical identities and percentages of composition have been withheld as trade secrets.

4. FIRST AID MEASURES

General Information

Inhalation

: Not expected to be a health hazard when used under normal conditions.

: Remove casualty to fresh air and keep at rest in a position comfortable for breathing. Cover with blanket to keep warm and rest in a guiet surrounding. Seek immediate

medical advice and attention.

Skin Contact Wash skin with large amount of water using soap.

Eye Contact Rinse cautiously with clean water for several minutes. Remove contact lenses, if present and easy to do, and continue rinsing. After rinsing for a minimum of 15

minutes, seek medical advice and attention.

: Without inducing vomiting, call a doctor for treatment. If mouth has been dirtied, clean Ingestion

with water.

Most Important

Inhalation if mist may cause feeling ill. Skin contact and eye contact may cause

Symptoms/Effects, Acute

5. FIRE FIGHTING MEASURES

& Delayed **Immediate Medical**

: Treat symptomatically. Call a doctor or poison control center for guidance.

: If swallowed, may irritate mucous membrane of stomach and induce vomiting.

Attention, Special

Treatment

Clear fire area of all non-emergency personnel.

Suitable Extinguishing

Media

: Concentrated strong liquid in mist and powder forms, carbon dioxide and foam. Use powder and carbon dioxide may be used small fires only. Effective to use foam to shutdown the air in a large fires.

Unsuitable Extinguishing

Media

: Do not use water in a jet.

Specific Hazards Arising from Chemicals

: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds

Fire fighting instructions

: Water the surrounding equipment to cool them down. Cordon off the affected place and its vicinity to all, except the concerned parties.

Protective Equipment & Precautions for Fighters : Ensure to wear protective equipment and approach from windward.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Section 8 of this SDS. See Section 13 for information on disposal. Observe the relevant local and international regulations.

Personal Precautions, Protective Equipment and Emergency Procedures

: Avoid contact with skin and eyes. Prepare suitable equipment and materials.

Environmental **Precautions**

: Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. In event of entering in the sea, extend oil fences to prevent from spreading, and sop up with absorbent materials. Use chemicals and/or detergents. they must satisfy technical standards as set by the Ministry of Land. Infrastructure and Transport / Ministry of the Environment.

Methods and Material for Containment and Clean Up

Promptly remove all ignition sources and stop leakages. In a small leakage, absorb and recover by use of soil, sand, sawdust and waste clothes. In a large leakage, cordon off the danger zone, prevent from entering and enclose it with sand bank and stop outflow. Cover liquid surface with foam, and recover liquid into containers.

Additional Advice

Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE **HANDLING**

Technical Measures

: In handling this material over the allocated volume, ensure approval to meet requires of the laws. Keep away from heat, sparks, open flames, hot objects. No smoking. Take measures against static discharge. Ensure to wear clothing and shoes made of conductive materials. When fixing or processing machine, it carries out after removing dangerous objects completely. NEVER suck up (siphoning) this material by mouth. Wear suitable protect equipment if skin or eve contact may cause. Seal containers hermetically without handling in violent such as falling, dropping, or jolting.

Ventilation Precautions Precautions for Safe Handling

see Section 8

STRAGE

Use under normal temperature. Prevent from mixing water and impurity. Avoid contact with halogens, strong acids, alkali and oxidizing materials.

Conditions for Safe Storage

: Keep containers tightly closed and in a cool, well-ventilated place away from direct sunlight. It is recommended to lock up storage area. Use properly labelled and closeable containers. Avoid heat, sparks, open flame and static accumulation. All electrical appliances shall be explosion-proof types, and they all must be earthed. Avoid contact and storage in same place with halogens, strong acids, alkali and

Technical Measures Precautions for Safe Stroage

oxidizing materials.

Recommended Materials :

Storage in original containers. Do not pressurize empty containers. May cause rupture. Do not weld, heat up, drill or cut containers. May ignite the residue and cause

explosion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Equipment

Seal or install ventilations for mist occurs. Install eye shower and body shower near working site.

Standard Concentration

Control

: Not specified

OSHA, Permissible **Exposure Limits (PEL)** : 5mg/m³ (Oil mist, mineral)

Occupational Exposure Limits

: Japan Society for Occupational Health(2018)⁽¹⁾ 3mg/m³ (Oil mist, mineral) ACGIH(2018) TWA[Inhalable fraction.](2) 5mg/m³ (Oil mist, mineral) : Skin protection not ordinarily required beyond standard issue work clothes.

Protective Equipment Respiratory Protection

: No respiratory protection is ordinarily required under normal conditions of use. Use

appropriate equipment in response to the circumstances.

Hand Protection Eye/Face Protection Skin and Body

Use oil-proof protective hand gloves under prolonged or repeated skin contact. : Wear safety glasses or full face shield if splashes are likely to occur.

Protection

: Use oil-proof/long sleeved clothing under prolonged usage.

Appropriate Sanitary

Measures:

: Remove immediately all contaminated clothing. Contaminated clothing must be

laundered before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid at room temperature.

Colour : Amber

Odour Characteristic mineral oil.

рΗ Not applicable.

Melting/freezing point Pour point: ≤ Approx. -20°C

Boiling point, initial boiling point and boiling range Expected >250°C Flash point ≥ 200°C (COC)

Flammability Capable of catching fire.

Upper/lower Flammability or Explosion limits Typical 1 - 10 %(V) (based on mineral oil)

Vapour pressure Data not available. Approx. 0.87g/cm³(15°C) **Density** Solubility Water: Negligible. Partition coefficient n-octanol/water Data not available.

Auto-ignition temperature Data not available. Expected >320°C

Decomposition Temperature Data not available. Kinetic viscosity Approx. 103mm²/s(40°C) Relative vapour density Data not available. Particle characteristics : Data not available.

10. STABILITY AND REACTIVITY

Chemical Stability/

Reactivity

: Stable under normal condition.

Hazardous Reactivity : Avoid contact with strong oxidizing agent. Avoid contact with halogens, strong acids, alkalis, and oxidizing materials. Conditions to Avoid

Incompatible Materials Data not available.

Hazardous Decomposition:

Products

Hazardous decomposition products are not expected to form during normal storage. Generates smoke, carbon monoxide, sulfurous acid gas etc. during combustion.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment Information given is based on data on the components and the toxicology of similar

products.

Unless indicated otherwise, the data presented is representative of the main component of a whole product, rather than for individual component(s). Individual components

contained above cut-off value is described on Section 3.

Acute Toxicity 1 Oral Expected to be of low toxicity: $LD_{50} > 5000 \text{ mg/kg}$, $Rat^{(3)}$

> 2 Dermal Expected to be of low toxicity: LD₅₀ > 5000 mg/kg, Rabbit⁽³⁾

3 Inhalation(Vapour) Data not available

4 Inhalation(Mist) Low toxicity: $LC_{50} > 5 \text{ mg/I}$, 4h, $Rat^{(3)}$

: Not classified as a skin irritation (rabbit test). (3) Prolonged/repeated contact may Skin Corrosion/Irritation

cause defatting of the skin which can lead to dermatitis.

Serious Eye

: Not classified as an eye irritation (rabbit test). (3

Damage/Irritation Respiratory or Skin

Sensitisation

: No data available concerning respiratory sensitisation.

Not classified as a skin sensitisation (Buehler test; guinea pig). (3)

Germ Cell Mutagenicity : The mutagenic potential of the product category 'other lubricant base oils' has been

extensively studied in a range of "in vivo" and "in vitro" assays. The majority of the

studies showed no evidence of mutagenic activity. (3)

Product contains mineral oils of types shown to be noncarcinogenic in animal skin-Carcinogenicity

painting studies.(3)

Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC monographs: Group 3)(4), ACGIH(5) and EU

Directives. (6)

Reproductive and **Developmental Toxicity** Specific target organ toxicity - single exposure Specific target organ toxicity - repeated

: Results of developmental and reproductive toxicity studies showed no evidence of

developmental or reproductive toxicity in rats. (3)

: Acute studies do not indicate any specific organ toxicity following single exposure. (3)

: The repeat dose toxicity has been investigated by dermal and inhalation routes for periods between 4 weeks and up to 2 years. No systemic effects showed. (3)

exposure

Aspiration Hazard

: Not classified as a hydrocarbon with kinetic viscosity ≤ 20.5mm2/s measured at 40°C. Not considered an aspiration hazard.

12. ECOLOGICAL INFORMATION

Basis for Assessment

Ecotoxicological data have not been determined specifically for this product.

Information given is based on a knowledge of the components and the ecotoxicology of

similar products.

Unless indicated otherwise, the data presented is representative of the main component of a whole product, rather than for individual component(s). Individual components

contained above cut-off value is described on Section 3.

Caution : Poorly soluble mixture. May cause physical fouling of aquatic organisms.

The Water Accommodated Fraction (WAF) is applied following tests...

Toxicity Fish(Fathead minnow, 96h) LL₅₀ $>100 mg/L^{(3)}$

>100mg/L(3) Fish(Fathead minnow, 14d) **NOEL** >10,000mg/L⁽³⁾ Crustacea (Daphnia magna, 48h) EL₅₀/NOEL Crustacea (Daphnia magna, 21d) NOEL $>10 \text{mg/L}^{(3)}$ >100mg/L⁽³⁾ Algae(Pseudokirchneriella subcapitata) **NOEL**

In a static 4-day microorganism luminescence inhibition study, no significant

luminescence inhibition was observed. (3)

Acute Aquatic Toxicity Chronic Aquatic Toxicity Mobility in soil

: Not expected to be a hazard. Not expected to be a hazard. Generally floats on water.

: Lubricating oil components have estimated log Koc >3, indicating these components are likely to be adsorbed onto soil and sediment and are not likely to leach to ground

water.

Persistence/degradability Another lubricant base oil was determined to be inherently biodegradable but not

readily biodegradable, with a mean degradation of 31% by day 28.

Not available as highly refined base oil. **Bioaccumulative Potential**

Not classified because this product not contained substances listed on Montreal Hazardous to ozone layer

Protocol and Ozone Layer Protection Law.

13. DISPOSAL CONSIDERATIONS

Material Disposal

1 Waste disposal yourself or entrust the industrial waste treatment company who obtained the prefectural governor's permission or municipal corporation. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

2 Do not dispose into the environment, in drains or in water courses.

3 For landfill disposal, destroy by fire and confirm cinders agreed to Waste Disposal

4 In event of burning this material, ensure to carryout work in safe place with guards in position, and select a method that would not cause any harm or damage to others during combustion or explosion.

Container Disposal

: Purify and recycle or performs suitable disposal in accordance with the standard of related laws and regulations. Disposal with remove content completely.

14. TRANSPORT INFORMATION

International Restriction

UN Class, Shipping : Not Dangerous Goods.

Name

UN Number : Not applicable. **Marine Pollutant** Yes. (contain oil.)

Domestic Restriction Since domestic laws and regulations shown below are applicable, containers and

transportation methods shall be required to follow each and every regulation.

Dangerous goods. Group 4 (flammable liquid), Class 4 petroleum, Danger grade III Land Fire Service Law: Container:

If product classified as dangerous goods, use containers (other than tanker, tank car and tank truck) for transportation usage, shall meet the Clause 2, Notice Attachment

concerning dangerous materials.

Sea Ship Safety Law: Not Dangerous Goods. Air Civil Aeronautics Act: Not Dangerous Goods.

Special safety measures for transportation or means of transportation

1 Caution: Not classified as flammable but will burn.

2 Transport remarkably with containers may not cause friction or agitation.

3 Display signage on vehicle and provide with fire fighting equipment, if and when required to transport more than the specified quantity. Total piled height of vehicle shall be less than 3 meters.

4 Consolidation of this material with dangerous goods belonging to the 1st and 6th Classification is prohibited.

5 Abide by other laws and regulations that are applicable.

15. REGULATORY INFORMATION

International Information

EINECS/ELINCS (EC) : All components listed or polymer exempt. TSCA (USA) All components listed or in compliance. **METI (JAPAN)** : All components listed or in compliance.

Domestic Information

Fire Service Law : Dangerous goods. Group 4 (flammable liquid), Class 4 petroleum, Danger grade

Pollutant Release and

Transfer Register (PRTR) Law

Law

Law

: Not applicable

Industrial Safety and Health

: Labeling(Delivery of Documents): Mineral oil 90-100%

Delivery of Documents: Molybdenum and its compounds <1%

Poisonous and Deleterious

Substance Control Law

: Not applicable

Marine Pollution Protection

: Waste Oil Regulation.

Sewage Control Law

: Mineral Oil Disposal Regulation. (5mg/L) : Oil Disposal Regulation. (5mg/L)

Water Pollution Prevention

Waste Disposal and Public

: Industrial Waste Regulation.

Cleaning Law

16. OTHER INFORMATION

- Subscribe "%" in this document means weight percentage.

- 1. Recommendation of Occupational Exposure Limits (2018), Japanese Society of Occupational Health
- 2. Thresholds limit values for chemical substances and physical agents and biological exposure indices, ACGIH (2018)
- 3. ECHA (European Chemicals Agency), website "ECHA CHEM", Information on Registered Substances (2011). SDS of EU suppliers (2011)
- 4. IARC Monographs Programme on the Evaluation of Carcinogenic Risk to Humans (2006)
- 5. ACGIH documentation (2006)
- 6. EC Directive 67/548/EEC Annex I, EU CLP Regulation(EC) No.1272/2008 Annex VI Table3.1, Table3.2

[Reference]

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 6th revised edition, UNITED NATIONS(2015)
- Japanese Standards Association (JSA), JIS Z 7253:2019, JIS Z 7252:2019
- National Institute of Technology and Evaluation (nite), "GHS Information"
- Ministry of Economy, Trade and Industry, Chemical Management site.
- Ministry of Health, Labour and Welfare, "Label and SDS information for GHS model"

Safety Data Sheet (SDS) about hazardous chemical is provided for a entrepreneur as reference information for safety handling. Refer to this document and perform suitable handling. Nothing in this document shall reduce the user's responsibility to satisfy itself as to the suitability, accuracy, reliability, and completeness of such information for its particular use. There is no warranty against intellectual property infringement. The information contained in this document is based upon data believed to be reliable through our supply chain at the time. So, we could not guarantee all about the contents. This document is based on JIS Z7253:2019/JIS Z7252:2019, and is not a guarantee of safety. Contents of SDS updated periodically. SDS compliance is required as a rule to all business enterprises engaged in transaction of chemicals (including products containing them) with other businesses. Retailer/ Wholesaler must provide newest SDS to customers.

[SDS Request]

As a rule, the direct delivery entrepreneur must provide the newest SDS to customer. Please contact not directly manufacturer but your supply chain company.