

### Section 1. Identification of the substance/mixture and of the company/undertaking

**GHS product identifier** : RUBIA FLEET HD 500 20W-50

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Engine oil

**Supplier's details** :

TotalEnergies Marketing (Thailand) Co., Ltd.  
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 Singapore 069547  
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[ms.ap-sds@totalenergies.com](mailto:ms.ap-sds@totalenergies.com)

**Emergency telephone number (with hours of operation)** :

Asia-Pacific: +65 3158 1074  
 Thailand: 001 800 120 666 751 (toll-free in country)

### Section 2. Hazards identification

**Classification of the substance or mixture** : Not classified.

GHS label elements

**Signal word** : No signal word.  
**Hazard statements** : No known significant effects or critical hazards.  
Precautionary statements  
**Prevention** : Not applicable.  
**Response** : Not applicable.  
**Storage** : Not applicable.  
**Disposal** : Not applicable.

**Other hazards which do not result in classification** : Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated light paraffinic	≤10	64742-55-8
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	64742-65-0
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	≤3	-
phenol, (tetrapropenyl) derivatives	≤0.1	74499-35-7

**Additional information** : Mineral oil of petroleum origin Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

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.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary



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- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Carbon dioxide.  
carbon monoxide  
Hydrogen sulfide  
Mercaptans  
nitrogen oxides (NO, NO<sub>2</sub> etc.)  
phosphorus oxides  
sulfur oxides  
Zinc oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : 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. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**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 and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : 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. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light paraffinic	<b>ACGIH TLV (United States, 1/2021).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<b>ACGIH TLV (United States, 1/2021).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- 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.
- Advisory OEL** : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined)

### Individual protection measures

- 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

<b>Eye/face protection</b>	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
<b><u>Skin protection</u></b>	
<b>Hand protection</b>	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Hydrocarbon-proof gloves Fluorinated rubber nitrile rubber Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
<b>Body protection</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection</b>	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	: <input checked="" type="checkbox"/> None under normal use conditions If these are not sufficient to maintain exposure to dusts below the OEL, suitable respiratory protection must be worn. (Type A/P1)

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

### Appearance

<b>Physical state</b>	: Liquid.
<b>Color</b>	: <input checked="" type="checkbox"/> Orange. [Dark]
<b>Odor</b>	: Characteristic.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: <input checked="" type="checkbox"/> Open cup: 248°C (478.4°F) [ASTM D 92]
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: <input checked="" type="checkbox"/> 0.885 [ASTM D 4052]
<b>Density</b>	: <input checked="" type="checkbox"/> 0.885 g/cm³ [15°C] [ASTM D 4052]
<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.
<b>Miscible with water</b>	: <input checked="" type="checkbox"/> No.
<b>Partition coefficient: n-octanol/water</b>	: <input checked="" type="checkbox"/> Not applicable.
<b>Auto-ignition temperature</b>	: Not available.



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- Decomposition temperature** : Not available.
- Viscosity** : ☒ Kinematic (40°C (104°F)): 155.3 mm<sup>2</sup>/s (155.3 cSt) [ASTM D 445]
- Flow time (ISO 2431)** : Not available.
- Particle characteristics**
- Median particle size** : ☒ Not applicable.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : ☒ Stable under recommended storage and handling conditions (see Section 7).
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : ☒ Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.
- Incompatible materials** : Strong oxidizing agents
- Hazardous decomposition products** : ☒ Carbon dioxide.  
carbon monoxide  
Hydrogen sulfide  
Mercaptans  
nitrogen oxides (NO, NO<sub>2</sub> etc.)  
phosphorus oxides  
sulfur oxides  
Zinc oxides

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or	LD50 Dermal	Rabbit	>4000 mg/kg	-	402



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catalytic dewaxed, light or heavy paraffinic C15-C50					
phenol, (tetrapropenyl) derivatives	LD50 Oral	Rat	>5000 mg/kg	-	401
	LD50 Dermal	Rat	>2000 mg/kg	-	-
	LD50 Oral	Rat	>2000 mg/kg	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Irritation/Corrosion

**Skin** : Based on available data, the classification criteria are not met.

**Eyes** : Based on available data, the classification criteria are not met.

**Respiratory** : Based on available data, the classification criteria are not met.

## Sensitization

**Skin** : Based on available data, the classification criteria are not met.

**Respiratory** : Based on available data, the classification criteria are not met.

## Mutagenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Carcinogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Reproductive toxicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Teratogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Specific target organ toxicity (single exposure)

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

**Ingestion** : No known significant effects or critical hazards.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking



**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity** : During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
phenol, (tetrapropenyl) derivatives	2500	2500	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), hydrotreated light paraffinic	Acute EC50 >100 mg/l	-	48 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOEL 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
	Chronic NOEL >1000 mg/l	Fish - Oncorhynchus mykiss	21 days	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EL50 >10000 mg/l	-	48 hours	OECD 202
	Acute LL50 >1000 mg/l	Fish - Oncorhynchus mykiss	96 hours	OECD 203
	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	OECD 211
Phenol, paraalkylation	Acute EC50 >500 mg/l	-	96 hours	201





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products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	Acute EC50 >1000 mg/l Acute LC50 >1000 mg/l	Daphnia - Daphnia magna Fish - Pimephales promelas	48 hours 96 hours	202 203
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**Conclusion/Summary** : This product contains one or more components that have a branched alkylphenol impurity which is very toxic to aquatic life (disclosed in section 3). Components containing the impurity have been tested and are not toxic to aquatic life. Therefore, the data in Section 3 for the alkylphenol impurity should not be used to classify the product for aquatic toxicity

## Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
Distillates (petroleum), solvent-dewaxed heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Product/ingredient name	Aquatic half-life		Photolysis	Biodegradability
Distillates (petroleum), solvent-dewaxed heavy paraffinic	-		-	Not readily

## Bioaccumulative potential

Product/substance	LogK <sub>ow</sub>	BCF	Potential
Distillates (petroleum), solvent-dewaxed heavy paraffinic	9.2	260	low
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	9.5	-	high

## Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility in soil** : Given its physical and chemical characteristics, the product generally shows low soil mobility The product is insoluble and floats on water Loss by evaporation is limited

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	ADR	IMDG	ICAO/IATA
UN/ID No	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

### Additional information

**ADR** : -

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

**Harmful Chemicals List** : Not listed

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Inventory list

<b>Australia inventory (AIIC)</b>	: <input checked="" type="checkbox"/> All components are listed, exempted, or notified.
<b>Canada inventory (DSL/NDSL)</b>	: All components are listed or exempted.
<b>China inventory (IECSC)</b>	: <input checked="" type="checkbox"/> All components are listed, exempted, or notified.
<b>Europe inventory (EINECS/ELINCS/NLP)</b>	: All components are listed or exempted.
<b>Japan inventory</b>	: <input checked="" type="checkbox"/> <b>Japan inventory (CSCL)</b> : All components are listed, exempted, or notified. <b>Japan inventory (ISHL)</b> : Not determined.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>	: All components are listed or exempted.
<b>Philippines inventory (PICCS)</b>	: All components are listed or exempted.
<b>Korea inventory (KECI)</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Taiwan Chemical Substances Inventory (TCSI)</b>	: All components are listed or exempted.
<b>Thailand inventory</b>	: Not determined.
<b>Turkey inventory</b>	: Not determined.
<b>United States inventory (TSCA 8b)</b>	: All components are listed or exempted.
<b>Vietnam inventory</b>	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

## Section 16. Other information

### History

<b>Date of revision</b>	: 2022/07/04
<b>Date of previous revision</b>	: 2021/04/09
<b>Version</b>	: 1.01

<b>Key to abbreviations</b>	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations
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### Procedure used to derive the classification

Classification	Justification
Not classified.	

<b>References</b>	: Not available.
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☒ Indicates information that has changed from previously issued version.

### Notice to reader



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To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.