



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 086690

RUBIA OPTIMA 1100 15W40

Date of the previous version: not applicable

Revision Date: 2016-10-18

Version 1

1. IDENTIFICATION

Product identifier

Product name RUBIA OPTIMA 1100 15W40

Other means of identification

Product Code(s) 086690

Number FQC
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Engine oil.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number

Company Phone Number +1 (908) 862-9300
Emergency telephone +1 866 928 0789 (24h/24, 7d/7)
+1 215 207 0061 (24h/24, 7d/7)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazard Statements

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None

Unknown Acute Toxicity

5.7962% of the mixture consists of ingredient(s) of unknown toxicity

Hazards not otherwise classified (HNOC)

None known

Other information

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Chemical Name | CAS-No | Weight % |
|--|-------------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0 | 5-<10% |
| reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate bis(nonylphenyl)amine | 125643-61-0 | 2,5-<5 |
| Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) | 36878-20-3 | 1-<2,5 |
| | 93819-94-4 | 1-<2,5 |
| Molybdene dithiocarbamide complex, polysulfur alkyl long chain | ^^ | 0,1-<0,3 |

Additional information

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

4. FIRST AID MEASURES

First aid measures for different exposure routes

| | |
|-----------------------|---|
| General advice | IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE. |
| Eye contact | Rinse immediately with plenty of water and seek medical advice. |
| Skin contact | Rinse immediately with plenty of water and seek medical advice. |
| Inhalation | Move to fresh air. |
| Ingestion | Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. |

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Most important symptoms/effects, acute and delayed

| | |
|---------------------|--|
| Skin contact | Not classified. |
| Eye contact | Not classified. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required. |
| Inhalation | Not classified. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. |
| Ingestion | Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

| | |
|---|--|
| <u>Suitable Extinguishing Media</u> | Use CO2, dry chemical, or foam. |
| <u>Unsuitable Extinguishing Media</u> | Do not use a solid water stream as it may scatter and spread fire. |
| <u>Special Hazard</u> | Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. |
| <u>Explosion Data</u> | |
| <u>Sensitivity to Mechanical Impact</u> | None. |
| <u>Sensitivity to Static Discharge</u> | None. |
| <u>Protective Equipment and Precautions for Firefighters</u> | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel. |

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | |
|----------------------------|---|
| General Information | Ensure adequate ventilation. For personal protection see section 8. |
| Other information | See Section 12 for additional information. |

Environmental precautions

General Information See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite)

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and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

| | |
|--------------------------------|---|
| Advice on safe handling | Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. |
| Hygiene measures | When using, do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing vapors, mist or gas. |

Conditions for safe storage, including any incompatibilities

| | |
|--|--|
| Technical measures/Storage conditions | Keep container tightly closed in a dry and well-ventilated place. Store in original container. |
|--|--|

| | |
|---------------------------|--|
| Materials to Avoid | Strong oxidizing agents. Strong reducing agents. Strong acids. Strong bases. |
|---------------------------|--|

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| | |
|------------------------|--|
| Exposure limits | Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m ³ , NIOSH (REL) TWA 5 mg/m ³ , STEL 10 mg/m ³ , ACGIH (TLV) TWA 5 mg/m ³ (highly refined). |
|------------------------|--|

Exposure controls

| | |
|-----------------------------|---|
| Engineering Measures | Apply technical measures to comply with the occupational exposure limits. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|--|
| General Information | If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied. |
| Eye/Face Protection | If splashes are likely to occur, wear: Safety glasses with side-shields. |
| Skin and body protection | Wear suitable protective clothing. Protective shoes or boots. |
| Hand Protection | Protective gloves. |

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Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

When using, do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing vapors, mist or gas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

| | |
|----------------------|--------------------------|
| Appearance | limpid |
| Color | No information available |
| Physical State @20°C | liquid |
| Odor | Characteristic |
| Odor Threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> | <u>Method</u> |
|------------------------------------|--|--------------------------|--------------------------|
| pH | | Not applicable | |
| Melting point/range | | No information available | |
| Boiling point/boiling range | | No information available | |
| Flash point | 234 °C 453 °F | | ASTM D 92 ASTM D 92. |
| Evaporation rate | | No information available | |
| Flammability Limits in Air | | No information available | |
| upper | | No information available | |
| Lower | | No information available | |
| Vapor Pressure | | No information available | |
| Vapor density | | No information available | |
| Relative density | 0.877 | @ 15 °C | ASTM D 1298 |
| Density | 877 kg/m ³ | @ 15 °C | ASTM D 1298 |
| Water solubility | | Not applicable | |
| Solubility in other solvents | | No information available | |
| logPow | | No information available | |
| Autoignition temperature | | No information available | |
| Decomposition temperature | | No information available | |
| Viscosity, kinematic | 118.2 mm ² /s 15.47 mm ² /s | @ 40 °C @ 100 °C | ASTM D 445 ASTM D 445 |
| Explosive properties | Not explosive | | |
| Oxidizing Properties | Not applicable | | |
| Possibility of hazardous reactions | No information available | | |
| <u>Other information</u> | | | |

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Freezing Point

No information available

Pour point

-30 °C

ASTM D 97

10. STABILITY AND REACTIVITY

| | |
|---|---|
| <u>Reactivity</u> | No information available. |
| <u>Chemical stability</u> | Stable under recommended storage conditions. |
| <u>Possibility of hazardous reactions</u> | None under normal processing. |
| <u>Conditions to Avoid</u> | Heat, flames and sparks. Take precautionary measures against static discharges. |
| <u>Incompatible Materials</u> | Strong oxidizing agents. Strong reducing agents. Strong acids. Strong bases. |
| <u>Hazardous Decomposition Products</u> | None under normal use. |

11. TOXICOLOGICAL INFORMATIONInformation on likely routes of exposure

| | |
|-------------------------------------|--|
| Principle Routes of Exposure | Inhalation, Ingestion, Eye contact, Skin contact. |
| Skin contact | Not classified. |
| Eye contact | Not classified. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required. |
| Inhalation | Not classified. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. |
| Ingestion | Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Acute toxicity - Product Information**

| | |
|---|---|
| Product Information | Product does not present an acute toxicity hazard based on known or supplied information. |
| Oral ATEmix (oral) | Not classified. 58204 mg/kg |
| Dermal ATEmix (dermal) | Not classified 52399 mg/kg |
| Inhalation ATEmix (inhalation-dust/mist) | Not classified 352.8 mg/l |

Acute toxicity - Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------------|-----------------------------------|--------------------------------|---------------------------------------|
| Distillates (petroleum), | LD50 > 5000 mg/kg bw (rat - OECD) | LD50 > 5000 mg/kg bw (rabbit - | LC50 (4h) > 5.53 mg/l (aerosol) (rat) |

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| | | | |
|---|------------------------------------|---------------------------------------|-------------|
| solvent-dewaxed heavy paraffinic 64742-65-0 | 420) | OECD 402) | - OECD 403) |
| reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate 125643-61-0 | LD50 > 2000 mg/kg (Rat - OECD 401) | LD50 > 2000 mg/kg (Rat - OECD 402) | |
| bis(nonylphenyl)amine 36878-20-3 | LD50 > 5000 mg/kg (Rat - OECD 401) | LD50 > 2000 mg/kg (Rat - OECD 402) | |
| Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) 93819-94-4 | LD50 2600 mg/kg (Rat) | LD50 > 3160 mg/kg (Rabbit - OECD 402) | |
| Molybdene dithiocarbamide complex, polysulfur alkyl long chain ^^ | LD50 > 2000 mg/kg (Rat - OECD 425) | LD50 > 2000 mg/kg (Rat - OECD 402) | |

Sensitization Carcinogenicity

Not classified as a sensitizer.

This product is not classified carcinogenic. 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.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|-------|------|-----|------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0 | | | | - |

Mutagenicity Reproductive toxicity Aspiration Hazard

This product is not classified as mutagenic. Contains no ingredient listed as a mutagen.

This product does not present any known or suspected reproductive hazards.

Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

No information available

Acute aquatic toxicity - Component Information

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates | Toxicity to microorganisms |
|---|--|---|--|----------------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0 | | LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203) | EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202) | |
| reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate 125643-61-0 | EC50 (72h) > 3 mg/l (Scenedesmus sp. - OECD 201) | LC50 (96h) > 74 mg/l (Brachydanio rerio - semi static - OECD 203) | EC50(24h) > 100 mg/l (Daphnia magan - OECD 202) | |

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|--|--|---|--|--|
| bis(nonylphenyl)amine 36878-20-3 | EC50 (72h) > 100 mg/l (Desmodesmus subspicatus - OECD 201) | LC50 (96h) > 100 mg/l (Brachyanio rerio - OECD 203) | EC50 (48h) > 100 mg/l (Daphnia magna - OECD 202) | |
| Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) 93819-94-4 | EbC50 (96h) 2.1 mg/l Selenastrum capricornutum (OECD 201) | LC50 (96h) 4.5 mg/l Oncorhynchus mykiss (OECD 203) | EL50 (48h) 5.4 mg/l Daphnia magna (OECD 202) | |
| Molybdene dithiocarbamide complex, polysulfur alkyl long chain ^^ | EC50 (72h) 14 mg/l (Selenastrum capricornutum - OECD 201) | LL50 (96h) 94.8 mg/l (Oncorhynchus mykiss - OECD 203) | EL50 (48h) 50 mg/l (Daphnia magna - OECD 202) | |

Chronic aquatic toxicity - Product Information

No information available

Chronic aquatic toxicity - Component Information

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Toxicity to microorganisms |
|---|-------------------|--|---|-------------------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0 | | NOEL (21d) 10 mg/l (Daphnia magna - OECD 211) | NOEL (14/28d) > 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox) | |

Effects on terrestrial organisms No information available.**Persistence and degradability****General Information** No information available.**Bioaccumulative potential****Product Information** No information available.**logPow** No information available**Component Information**

| Chemical Name | log Pow |
|--|---------|
| reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate 125643-61-0 | 9.2 |
| bis(nonylphenyl)amine 36878-20-3 | 7.7 |
| Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) 93819-94-4 | 0.9 |
| Molybdene dithiocarbamide complex, polysulfur alkyl long chain ^^ | 5.1 |

Mobility

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Soil Given its physical and chemical characteristics, the product generally shows low soil mobility

Air Loss by evaporation is limited

Water Insoluble The product spreads on the surface of the water.

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any

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chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute Health Hazard | no |
| Chronic Health Hazard | no |
| Fire Hazard | no |
| Sudden Release of Pressure Hazard | no |
| Reactive Hazard | no |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

No information available

16. OTHER INFORMATION

| | | | | |
|--------------------|-----------------|----------------|-------------------|--|
| <u>NFPA</u> | Health Hazard 1 | Flammability 0 | Instability 0 | Physical and chemical hazards - Personal protection X |
| <u>HMIS</u> | Health Hazard 1 | Flammability 0 | Physical Hazard 0 | |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

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Revision Note

*** Indicates updated section

Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

bw = body weight

bw/day = body weight/day

EC x = Effect Concentration associated with x% response

GLP = Good Laboratory Practice

IARC = International Agency for Research of Cancer

LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

LL = Lethal Loading

NIOSH = National Institute of Occupational Safety and Health

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

Legend

Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values

PEL - Permissible Exposure Limits

IDHL - Immediately Dangerous to Life or Health concentrations

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S* - Skin notation

TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet

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