



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

1. IDENTIFICATION

Product identifier

Product name RUBIA S 40

Other means of identification

Product Code(s) 083096

Number 745
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Heavy duty diesel.

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 CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation - Category 2A
Skin sensitization - Category 1
Reproductive toxicity - Category 2

Label elements

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

**WARNING**

Causes serious eye irritation
 May cause an allergic skin reaction
 Suspected of damaging fertility or the unborn child

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapours/ spray
 Contaminated work clothing should not be allowed out of the workplace
 Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see Section 4 on this label)
 IF exposed or concerned: Get medical advice/attention

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention

Skin

IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/ container to an approved waste disposal plant

Unknown Acute Toxicity

No information available

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.

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	84605-29-8	0-5
Benzene sulfonic acid, mono-C16-24-alkyl derivatives, calcium salts	70024-69-0	0-5
Phenol, dodecyl-, branched	121158-58-5	0-5
O,O,O-triphenyl phosphorothioate	597-82-0	0-5

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

** The exact percentage (concentration) of composition has been withheld as a trade secret****

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	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Get medical attention immediately if irritation persists.
Skin contact	Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. May cause an allergic skin reaction. Seek medical attention if skin irritation, swelling or redness develops and persists.
Inhalation	Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.
Ingestion	If swallowed, do not induce vomiting - seek medical advice. Never give anything by mouth to an unconscious person. Rinse mouth. May produce an allergic reaction.

Most important symptoms/effects, acute and delayed

Skin contact	Causes mild skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Inhalation	Not classified. Inhalation of dust in high concentration may cause irritation of respiratory system.
Ingestion	Suspected of damaging fertility or the unborn child. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Itching.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Foam. Carbon dioxide (CO₂). ABC powder. Water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard 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.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters 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 Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use mechanical means such as pumps, skimmers and absorbent materials.

7. HANDLING AND STORAGE

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

Precautions for safe handling

Advice on safe handling

When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

Prevention of fire and explosion

Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment.

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a banded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. Keep in properly labeled containers.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined).

Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

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	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.
Respiratory protection	None required under normal usage. 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	Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance	viscous
Color	amber
Physical State @20°C	liquid
Odor	Petroleum distillates
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		Not applicable	
Flash point	232 °C 450 °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	

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

Vapor density		No information available	
Relative density	0.884	@ 15 °C	
Density	884 kg/m ³	@ 15 °C	
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		Not applicable	
Decomposition temperature		No information available	
Viscosity, kinematic	135 mm ² /s	@ 40 °C	ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
Other information			
Specific Gravity	0.884	@ 15 °C	
Freezing Point		No information available	
Pour point	-15 °C		ASTM D 97

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Numerical measures of toxicity

ATEmix (oral)	5237 mg/kg
ATEmix (dermal)	5172 mg/kg

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

Inhalation**ATEmix (inhalation-dust/mist)** 5.5 mg/l**ATEmix (inhalation-vapor)** 23.1 mg/l**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	LD50 3200 mg/kg (Rat - OECD 401)	LD50 > 2002 mg/kg (Rat - OECD 402)	
Benzene sulfonic acid, mono-C16-24-alkyl derivatives, calcium salts 70024-69-0	LD50 > 5000 mg/kg (Rat - OECD 401)	LD50 > 5000 mg/kg (Rabbit - OECD 402)	
Phenol, dodecyl-, branched 121158-58-5	LD50 2700 mg/kg (Rat)	LD50 > 3160 mg/kg (Rat)	

Information on toxicological effects

Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Itching.
Skin contact	Causes mild skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Inhalation	Not classified. Inhalation of dust in high concentration may cause irritation of respiratory system.
Ingestion	Suspected of damaging fertility or the unborn child. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Serious eye damage/eye irritation	Irritating to eyes.
Sensitization	May cause an allergic skin reaction. Contains sensitizer(s).
Carcinogenicity	This product is not classified carcinogenic.

Mutagenicity	This product is not classified as mutagenic.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Other adverse effects	Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).
Aspiration Hazard	Not classified.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Acute aquatic toxicity - Product Information**

No experimental data available

Version GNAM

SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	ErC50 (72h) 24 mg/l (Desmodesmus subspicatus - OECD 201)	LL50 (96h) 4.5 mg/l (Oncorhynchus mykiss - OECD 203)	EL50 (48h) 23 mg/l (Daphnia magna - OECD 202)	
Benzene sulfonic acid, mono-C16-24-alkyl derivatives, calcium salts 70024-69-0	EC50 (72h) > 1000 mg/l (Pseudokirchnerella subcapitata - static)	LL50 (96h) > 10000mg/l (WAF - Cyprinodon variegatus - OECD 203)	EC50 (48h) > 1000 mg/l (WAF - Daphnia magna - static)	
Phenol, dodecyl-, branched 121158-58-5	EbC50 (72h) 0.15 mg/l (Scenedesmus subspicatus - OECD 201)	EL50(96h) 40 mg/l Pimephales promelas semi-static (OECD 203)	EC50(48h) 0.037 mg/l (Daphnia magna - static - OECD 202)	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Phenol, dodecyl-, branched 121158-58-5		NOEC(21d) 0.0037 mg/l (Daphnia magna - semi-static - OECD 211)		

Effects on terrestrial organisms No experimental data 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
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	0.56
Phenol, dodecyl-, branched 121158-58-5	7.14

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

Mobility

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

Air Loss by evaporation is limited

Water The product is insoluble and floats on water

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment**

Waste Disposal Methods Dispose of in accordance with local regulations.

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

International Inventories All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)

U.S. Federal Regulations

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

SARA 313

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

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Phenol, dodecyl-, branched	121158-58-5	0-5		Group V		

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

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
Paraffin oils (petroleum), catalytic dewaxed heavy 64742-70-7	X			
Distillates (petroleum), hydrotreated light paraffinic 64742-55-8	X			

Version GNAM



SDS # : 083096

RUBIA S 40

Date of the previous version: 2015-05-12

Revision Date: 2015-10-13

Version 1.01

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection X

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

Revision Date: 2015-10-13
Revision Note *** Indicates updated section
Abbreviations, acronyms

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

Version GNAM