



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

1.1 Product identifier:	Eni Rotra SX/S
1.2 Relevant identified uses of the substance or mixture and uses advised against:	
Use of the substance/mixture:	Gear oil
1.3 Details of the supplier of the Safety Data Sheet:	Eni Schmiertechnik GmbH Paradiesstr. 14, 97080 Würzburg Tel. (+ 49) 931 - 900 98-0 Fax (+ 49) 931-98442
Advising/Support:	Technical Department, Tel. (+49) 931 900 98-145 technik.wuerzburg@agip.de www.enischmiertechnik-datenblaetter.de

Section 2. Hazards identification.

2.1 Classification of the substance or mixture:

Regulation (EC) No. 127272008:

Hazard categories: Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory/skin sensitization: Skin Sens. 1
Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard statements: May cause an allergic skin reaction
Causes serious eye irritation
Harmful to aquatic life with long lasting effects

2.2 Label elements:

Regulation (EC) No. 127272008:

Hazardous components which must be listed on the label: Pentene, 2,4,4-trimethyl-, sulfurized
Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched)
Long-chain alkyl amine

Signal word: Warning

Pictograms:



Hazard statements: H317: May cause an allergic skin reaction
H319: causes serious eye irritation
H412: Harmful to aquatic life with long lasting effects

Precautionary statements: P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P264: Wash ... thoroughly after handling
P272: Contaminated work clothing should not be allowed out of the workplace
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of water
P333+P313: If skin irritation or rash occurs: Get medical advice/attention
P362+P364: Take off contaminated clothing and wash it before reuse
P305+P351+P338: IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313: If eye irritation persists: Get medical advice/attention
P501: Dispose of contents/container to of the disposal according to local regulations



Section 3. Composition/information on ingredients.

3.2 Mixtures:

Hazardous components:

CAS-No.	Chemical name	Quantity
	EC-No. Index-No. REACH-No.	
	Classification according to Regulation (EC) No. 1272/2008 [2008]	
	Pentene, 2,4,4-trimethyl-, sulfurized	1 - < 5%
	273-103-3	
	Skin Sens. 1, Aquatic Chronic 4; H317 – H413	
	Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched)	1 - < 5%
	931-384-6 01-2119493620-38	
	Flam. Liq. 3, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 2; H226 – H302 – H318 – H317, H411	
	Long-chain alkyl amine	< 1%
	Acute Tox. 2, Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H330 - H311 - H302 - H314 - H317 - H400 - H410	
	O,O,O-triphenyl phosphorothioate	< 1%
	209-909-9	
	Repr. 2, Aquatic Chronic 4; H361 – H413	

Full text for H and EUH phrases: see Section 16.

Section 4. First aid measures.

4.1 Description of first aid measures:

General information:

Self-protection of the first helper. Change contaminated clothing. Do not put any product impregnated cleaning rags into your trouser pockets.

After inhalation:

In case of inhalation of aerosols/spray/mist/splash spots: Consult a physician. Provide fresh air. Avoid breathing dust/fume/gas/mist/vapours/spray. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

After contact with skin:

After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of water and soap.
If skin irritation or rash occurs: Get medical advice/attention.

After contact with eyes:

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion:

Rinse mouth immediately and drink large quantities of water. If swallowed, do not induce vomiting: seek medical advice immediately and show this container label.

4.2 Most important symptoms and effects both acute and delayed:

No data available.

4.3 Indication of any immediate medical attention and special treatment needed:

Caution if victim vomits: Risk of aspiration.
Aspiration hazard: Immediately get medical attention.

Section 5. Fire fighting measures.

5.1 Extinguishing media:

Suitable extinguishing agents:

Coordinate fire-fighting measures to the fire surroundings.
Carbon dioxide (CO₂), dry extinguishing powder, foam.

Unsuitable extinguishing media:

High power water jet.

5.2 Special hazards arising from the substance or mixture:

Special exposure hazards arising from the substance itself, combustion products, resulting gases: Carbon dioxide (CO₂), carbon monoxide, sulphur oxides, phosphorus oxides, hydrogen sulphide (H₂S).

5.3 Advice for fire fighters:

Carbon black in case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.



Additional information: Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Dispose of waste according to applicable legislation. Use water spray/stream to protect personnel and to cool endangered containers.

Section 6. Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures: Special danger of slipping by leaking/spilled product. Wear suitable protective clothing. Wear respiratory protection when in the presence of vapour, dust and aerosols.

6.2 Environmental precautions: Do not allow to enter into surface water or drains. Prevent spreading over a wide area (e. g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (e. g. sand, diatomaceous earth, acid or universal binding agents). Treat the recovered material according to the section on waste disposal.

6.4 Reference to other sections: In case of gas escape or entry into waterways, soil or drains, inform the responsible authorities.

Section 7. Handling and storage.

7.1 Precautions for safe handling:
Advice on safe handling: Protect skin by using skin protective cream. Wash hands before breaks and at the end of work.
Conditions to avoid: Aerosol or mist generation.

Advice on protection against fire and explosion: No special measures are necessary. When using do not smoke.
Fire class: B (DIN-/EN-Norms: EN2)

7.2 Conditions for safe storage, including any incompatibilities:
Requirements for storage rooms and vessels: Keep container tightly closed.
Keep away from heat. Keep/store only in original container.

Advice on storage compatibility: Do not store together with: Food and fodder, oxidizing agents.

Further information on storage conditions: If product enters soil, it will be mobile and may contaminate groundwater.
Keep away from heat.

7.3 Specific end use(s): Gear oil

Section 8. Exposure controls/personal protection.

8.1 Control parameters:

8.2 Exposure controls:
Protective and hygiene measures: When using do not eat, drink or smoke. Change contaminated clothing. Wash hands before breaks and at the end of work. Protect skin by using skin protective cream. Keep away from food, drink and animal feedingstuffs. Do not breathe vapour.

Eye/face protection: In fine dispersion/spraying/misting: protective gloves/protective clothing.

Hand protection: Wear suitable gloves.

Skin protection: In fine dispersion/spraying/misting: Wear protective gloves/protective clothing.

Respiratory protection: Wear breathing apparatus if exposed to vapour, dust and aerosols.

Section 9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties:

Physical state: Liquid

Colour: Amber

Odour: Characteristic

pH value: Not applicable (DIN 51369)

Changes in the physical state:

Pourpoint: ~ -38°C (DIN ISO 3016)

Flashpoint: > 200°C (ISO 2592)

Ignition temperature: No data available



Vapour pressure (at 20°C):	< 0,1 hPa (Calculated)
Density at 15°C:	~ 0,869 g/cm ³ (DIN 51757)
Water solubility (at 20°C):	Practically insoluble
Solubility in other solvents:	Soluble in hydrocarbons (mineral oil)
Dyn. Viscosity at 0°C:	0 mPa s
Kin. Viscosity at 100°C:	16,8 mm ² /s (DIN 51562)
Flow time at 0°C:	0 s
Solvent separation test:	No data available
Solvent content:	No solvents
9.2 Other information:	
Solid content:	0 - None

Section 10. Stability and reactivity.

10.1 Reactivity:	No data available.
10.2 Chemical stability:	No thermal decomposition if properly stored/handled/transported. Onset of decomposition at elevated temperatures (> 65°C).
10.3 Possibility of hazardous reactions:	Possible with strong oxidizing agents. This product is stable under normal conditions. Hazardous reactions are unlikely.
10.4 Conditions to avoid:	No data available.
10.5 Incompatible materials:	Oxidizing agents, strong.
10.6 Hazardous decomposition products:	None
Further information:	No thermal decomposition if properly stored/handled/transported.

Section 11. Toxicological information.

11.1 Information on toxicological effects:

Acute toxicity: No data available. Irritant effect on the respiratory tract: Do not breathe gas/vapour.

CAS- no.	Chemical name			
	Exposure routes	Dose	Species	Source
	Reaction products of bis(2-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched)			
	Oral	ATE 500 mg/kg		
	Long-chain alkyl amine			
	Oral	LD50 > 500 mg/kg	Rat	
	Dermal	LD 50 201 – 1000 mg/kg	Rabbit	
	Inhalative vapour	ATE 0,5 mg/l		
	Inhalative aerosol	ATE 0,05 mg/l		

Irritation and corrosivity:	Irritant effect on the skin: None Frequent and prolonged eye contact may cause eye irritation.
Sensitising effects:	Due to the very low concentration of sensitizing substances, the finished product can be assumed not to be skin-sensitizing.
Carcinogenic/mutagenic/toxic effects for reproduction:	The product is not classified.
STOT-repeated exposure:	Frequently or prolonged contact with skin may cause dermal irritation.
Specific effects in experiment on an animal:	No data available.
Additional information on tests:	The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).
Practical experience:	
Observations relevant to classification:	Has de-greasing effect on the skin.
Other observations:	No special hazards known when the product is properly used and the precautionary measures indicated are observed.



Section 12. Ecological information.

12.1 Toxicity:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
12.2 Persistence and degradability:	Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants. Poorly eliminated from water. Not easily biodegradable (according to OECD criteria). Product is partially biodegradable. Significant residues remain. Post-use oils must not be discharged into the sewer system or into surface waters nor must they be allowed to enter the soil.
12.3 Bioaccumulative potential:	No data available. Do not allow uncontrolled discharge of product into the environment.
12.4 Mobility in soil:	No data available.
12.5 Results of PBT and vPvB assessment:	No data available.
12.6 Other adverse effects:	Aquatic organisms: No data available. Effects in sewage plants: No data available.
Further information:	Do not allow to enter into surface water drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

Section 13. Disposal considerations.

13.1 Waste treatment methods: Advice on disposal:	The waste codes stated are recommendations based on the expected use of the substance and may be re-assigned to other waste codes by the user, if applicable. Dispose of waste according to applicable legislation. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Waste disposal number of waste from residues/unused products:	13 02 06 – Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils. Classified as hazardous waste.
Waste disposal number of used products:	13 02 06 – Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils. Classified as hazardous waste.
Waste disposal number of contaminated packaging:	15 01 10 – waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances. Classified as hazardous waste.
Contaminated packaging:	Dispose of this material and its container to hazardous or special waste collection point. Non-contaminated packages may be recycled. Handle contaminated packaging in the same way as the substance itself.

Section 14. Transport information.

Land transport (ADR/RID):	No dangerous good in sense of this transport regulation
Inland waterways transport (ADN):	No dangerous good in sense of this transport regulation
Marine transport (IMDG):	No dangerous good in sense of this transport regulation
Air transport (ICAO):	No dangerous good in sense of this transport regulation
14.5 Environmental hazards: ENVIRONMENTALLY HAZARDOUS:	No
14.6 Special precautions for user:	No dangerous good in sense of this transport regulation
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code:	No dangerous good in sense of this transport regulation



Section 15. Regulatory information.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU regulatory information:

2004/42/EC (VOC): 0%

National regulatory information:

Water hazardous class (WGK) (D): 2 –water contaminating

16. Other information.

The information contained in this safety data sheet is based on our current information level. It does not give assurance for certain product properties and does not establish a contractual relationship. This information relates only to the specific material and may not be valid if the material is used in combination with any other material or in any process.

Relevant H and EUH statements (number and full text):

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

Changes in section: 2, 3, 11, 16