



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

1.1 Product identifier:

Product name: eni i-Sigma top MS 15W-40
Material uses: Lubricating oil for automotive engines

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

Not applicable

1.3 Details of the supplier of the Safety Data Sheet:

Manufacturer/Distributor: 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

2. Hazards identification.

2.1 Classification of the substance or mixture:

Product definition: Mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]: The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Not classified.
Ingredients of unknown toxicity: None
Ingredients of unknown ecotoxicity: None
Classification according to Directive 1999/45/EC [DPD]: The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.
Classification: Not classified.
See section 16 for the full text of the R-phrases declared above.
See section 11 for more detailed information on health effects and symptoms.

2.2 Label elements:

Signal word: No signal word
Hazard statements: No known significant effects or critical hazards
Precautionary statements:
General: Not applicable
Prevention: Not applicable
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable
Supplement label elements: Safety Data Sheet available on request
Special packaging requirements:
Containers to be fitted with child-resistant fastenings: Not applicable
Tactile warning of danger: Not applicable

2.3 Other hazards:

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII: Not applicable
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII: Not applicable
Other hazards which do not result in classification: Defatting to the skin



3. Composition/information on ingredients.

3.2 Mixtures:	Mixture
Product/ingredient name:	Distillates (petroleum), hydrotreated heavy paraffinic, $\geq 75 - < 90$ REACH-No. 01-2119484627-25, EC: 265-157-1, CAS-No. 64742-54-7, Index: 649-467-00-8 Classification (according to 67/548/EEC): Not classified Classification (according to Regulation (EC) No. 1272/2008 [CLP]): Not classified. Type: [2] Phosphorodithioic acid, mixed O,O-bis(1,3-dimehtylbutyl and iso-Pr) esters, zinc salts, $\geq 1 - < 2$ Classification (according to 67/548/EEC): Xi; R38; N; R51/53 Classification (according to Regulation (EC) No. 1272/2008 [CLP]): Skin Irrit. 2, H315; Aquatic Chronic 2, H411 Type: [1] See Section 16 for the full text of the R- and H statements declared above. The mineral oils in the product contain $< 3\%$ DMSO extract (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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section. Type: [1] Substance classified with a health or an environmental hazard [2] Substance with a workplace exposure limit

4. First aid measures.

4.1 Description of the 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. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
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 recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both 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.

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

Notes to physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments:	No specific treatment.



5. Fire fighting measures.

5.1 Extinguishing media:

Suitable extinguishing media: Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media: Do not use water jet.

5.2 Special hazards arising from the substance or mixture:

Hazards from the substance or mixture:

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:

Decomposition products may include the following materials:

Carbon dioxide, carbon monoxide, sulphur oxides, phosphorus oxides, metal oxide/oxides

5.3 Advice for fire fighters:

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. Clothing for fire fighters (including helmets, protective boots and gloves) conforming to European Standard EN 469 will provide a basic level of protection for chemical incidents.

6. Accidental release measures.

6.1 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 specialised 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".

6.2 Environmental precautions:

Avoid dispersal of spilt 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).

6.3 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. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections:

See section 1 for emergency contact information.

See section 8 for information on appropriate personal protective equipment.

See section 13 for additional waste treatment information.

7. Handling and storage.

The information in this section contains generic advice and guidance. The list of identified uses in section 1 should be consulted for any available use-specific information provided in the exposure scenario(s).

7.1 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.



7.2 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s):

Recommendations: Not available

Industrial sector specific solutions: Not available

8. Exposure controls/personal protection.

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters:

Occupational exposure limits:

Distillates (petroleum), hydrotreated heavy paraffinic
Exposure limit values (Belgium, 11/2011)
TWA: 5 mg/m³ 8 hours. Form: mist
STEL: 10 mg/m³ 15 minutes. Form: mist
Mineral oil
EU OEL (Europe): TWA: 5 mg/m³ (oil mist)

Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following:

European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy)

European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents)

European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents)

Reference to national guidance documents for the methods for the determination of hazardous substances will also be required.

DNELs/DMELs:

No DNELs/DMELs available.

PNECs:

No PNECs available.

8.2 Exposure controls:

Appropriate engineering controls:

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

Eye/face protection:

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 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

Skin protection:

Hand protection:

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. Wear suitable gloves tested to EN 374. Recommended: < 1 hour (breakthrough time):
Recommended: Nitrile gloves



Body protection:	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.
Other skin protection:	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.
Respiratory protection:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Boiling point > 65°C: A1; Boiling point < 65°C: AX1; Hot material: A1P2
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.

9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties:

Appearance:	
Physical state:	Liquid (oily liquid)
Appearance:	Clear
Colour:	Yellow (light)
Odour:	Characteristic
Odour threshold:	Not available
pH:	8
Melting/freezing point:	< -24°C
Initial boiling point/range:	> 250°C
Flashpoint:	Open cup: > 200°C (ASTM D 92)
Evaporation rate:	Not available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	< 0,01 kPa (room temperature)
Vapour density:	Not available
Relative density:	0,88
Solubility(ies):	Insoluble in the following materials: cold and hot water
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	> 300°C
Decomposition temperature:	> 300°C
Viscosity at 40°C:	112 cSt
Viscosity at 100°C:	12,5 to 16,3 cSt
Explosive properties:	Not applicable
Oxidising properties:	Not applicable
9.2 Other information:	No additional information

10. Stability and reactivity.

10.1 Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability:	The product is stable.
10.3 Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid:	No specific data.
10.5 Incompatible materials:	Reactive or incompatible with the following materials: Strong oxidizing materials.
10.6 Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.



11. Toxicological information.

11.1 Information on toxicological effects:

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Dermal	Rat	5000 mg/kg	-
	LD50 Oral	Rat	10000 mg/kg	-
Phosphorodithioic acid, mixed O,O(1,3-dimethylbutyl and iso-Pr)esters, zinc salts	LD50 Oral	Rat	3,2 g/kg	-

Conclusion/summary: Not available

Acute toxicity estimates: Not available

Irritation/corrosion:

Conclusion/summary: Not available

Sensitisation:

Conclusion/summary: Not available

Mutagenicity:

Conclusion/summary: Not available

Carcinogenicity:

Conclusion/summary: Not available

Reproductive toxicity:

Conclusion/summary: Not available

Teratogenicity:

Conclusion/summary: Not available

Specific target organ toxicity (single exposure):

Not available

Specific target organ toxicity (repeated exposure):

Not available

Aspiration hazard:

Not available

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

Conclusion/summary:

Not available



General:	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Other information:	Not available

12. Ecological information.

12.1 Toxicity:	
Conclusion/summary:	Not available
12.2 Persistence and degradability:	
Conclusion/summary:	Not available
12.3 Bioaccumulative potential:	Not available
12.4 Mobility in soil:	
Soil/water partition coefficient (K_{oc}):	Not available
Mobility:	Not available
12.5 Results of PBT and vPvB assessment:	
PBT:	Not applicable
vPvB:	Not applicable
12.6 Other adverse effects:	No known significant effects or critical hazards.

13. Disposal considerations.

The information in this section contains generic advice and guidance. The list of identified uses in section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods:

Product:

Methods of disposal: The generation of waste should be avoided or minimised 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.

Hazardous waste: Yes

European waste catalogue (EWC): Waste code: 13 02 05* - mineral-based none-chlorinated engine, gear and lubricating oils

Packaging:

Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information.

14.1 UN number:	
ADR/RID, ADN, IMDG, IATA:	Not regulated
14.2 UN proper shipping name:	
ADR/RID, ADN, IMDG, IATA:	--
14.3 Transport hazard class(es):	
ADR/RID, ADN, IMDG, IATA:	--



14.4 Packing group:

ADR/RID, ADN, IMDG, IATA: --

14.5 Environmental hazards:

ADR/RID, ADN, IMDG, IATA: No

Additional information:

ADR/RID, ADN, IMDG, IATA: --

14.6 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.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not available

15. Regulatory information.

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

EU Regulation (EC) NO. 1907/2006 (REACH):

Annex XIV - List of substances subject to authorisation:

Annex XIV: None of the components are listed.

Substance of very high concern: None of the components are listed.

Other EU Regulations:

Europe inventory: Not determined

Seveso II Directive: This product is not controlled under the Seveso II Directive.

Hazard class for water (WGK): 2 Appendix No. 4

Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required.

16. Other information.

This information relates only to the specific product and may not be valid if the product is used in combination with any other material or in any process. The informations in this sheet are according to our best knowledge at the date of printing.

Abbreviations and acronyms:

ATE: Acute Toxicity Estimate
 CLP: Classification, Labelling and Packaging Regulation
 [Regulation (EG) No. 1272/2008]
 DMEL: Derived Minimal Effect Level
 DNEL: Derived No Effect Level
 EUH-Satz: CLP-specific hazard statement
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted No Effect Concentration
 RRN: REACH Registration Number
 vPvB: Very persistent und very bioaccumulative

Procedure used to derive the classification according to Regulation (EC) 1272/2008 [CLP/GHS]:

Not classified

Full text of abbreviated H-phrases:

H315 Causes skin irritation
 H411 Toxic to aquatic life with long lasting effects

Full text of classifications [CLP/GHS]:

Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) – Category 2
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION – Category 2

Full text of abbreviated R-phrases:

R38 Irritation to skin
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of classifications [DSD/DPD]:

Xi Irritant
 N Dangerous for the environment



Changes:

1 - 16