



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

### 1.1 Product identifier:

Product name: eni i-Sigma Universal 10W-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

## Section 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: P103 – Read label before use.  
P102 – Keep out of reach of children.  
P101 – If medical advice is needed, have product container or label at hand.

Prevention: Not applicable  
Response: Not applicable  
Storage: Not applicable  
Disposal: Not applicable  
Supplemental label elements: Not applicable

### 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. Prolonged or repeated contact may dry skin and cause irritation.



## Section 3. Composition/information on ingredients.

### 3.2 Mixtures:

#### Mixture

Product/ingredient name	Identifies	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	REACH 01-2119471299-27 EC 265-169-7 CAS 6472-65-0 Index 649-474-00-6	≥ 25 - < 50	Not classified	Not classified	[2]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	REACH 01-2119474889-13 EC 276-738-4 CAS 72623-87-1 Index 649-483-00-5	≥ 25 - < 50	Not classified	Asp. Tox. 1; H304	[1] [2]
Distillates (petroleum), hydrotreated heavy paraffinic	REACH 01-2119484627-25 EC 265-157-1 CAS 64742-54-7 Index 649-467-00-8	≥ 10 - < 25	Not classified	Not classified	[2]
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	REACH 01-2119493626-26 EC 283-392-8 CAS 84605-29-8	≥ 1 - < 2	Xi; R38  N; R51/53	Skin Irrit. 2, H315  Aquatic Chronic 2, H411	[1]
			See section 16 for the full text of the R-phrases declared above	See section 16 for the full text of the 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, are classified and contribute to the classification of the substance and hence require reporting in this section.

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, vPvBs or substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type: [1] Substance classified with a health or environmental hazard

Type: [2] Substance with a workplace exposure limit

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

## Section 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.

**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. 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.

**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.

## Section 5. Fire fighting measures.

### 5.1 Extinguishing media:

Suitable extinguishing media: Use dry chemical, CO<sub>2</sub>, 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.

## Section 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 information in "For non-emergency personnel".

### 6.2 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).

### 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



Reference to other sections: container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.  
 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.

## Section 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

## Section 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:

Product/ingredient name	Exposure limit values
Distillates (petroleum), solvent-dewaxed heavy paraffinic	EU OEL (Europe) TWA 5 mg/m <sup>3</sup> (oil mist)
Distillates (petroleum), hydrotreated heavy paraffinic	EU OEL (Europe) TWA 5 mg/m <sup>3</sup>

#### 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 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 and procedures for the measurement of chemical agents), reference to national guidance documents for 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, 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.

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): nitrile rubber 0,17 mm.

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: AX 1; 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.

## Section 9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state:

Liquid (oily liquid)

Appearance:

Clear

Colour:

Brown

Odour:

Slight

Odour threshold:

Not available

pH:

8

Melting/freezing point:

< -27°C

Initial boiling point/range:

> 300°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:

0,873

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:	90,5 cSt
Viscosity at 100°C:	13,45 cSt
Explosive properties:	Not applicable
Oxidising properties:	Not applicable
9.2 Other information:	No additional information

## Section 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 oxidising materials.
10.6 Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information.

### 11.1 Information on toxicological effects:

#### Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation dusts and mists	Rat – male, female	5,53 mg/l	4 hours
	LD50 Dermal	Rabbit	> 5.000 mg/kg	--
	LD50 Oral	Rat	> 5.000 mg/kg	--
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Dermal	Rat	5.000 mg/kg	--
	LD50 Oral	Rat	10.000 mg/kg	--
Phosphorodithioic acid, mixed O,O-bis(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:

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Skin – Erythema/Eschar	Rabbit	0,17	72 hours	7 days
	Skin - Edema	Rabbit	0	72 hours	7 days
	Eyes – Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes – Redness of the conjunctivae	Rabbit	0,33	48 hours	72 hours

Conclusion/summary: Not available

#### Sensitisation:

Product/ingredient name	Route of exposure	Species	Result
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Skin	Guinea pig	Not sensitizing

Conclusion/summary: Not available



Mutagenicity:

Product/ingredient name	Test	Experiment	Result
Distillates (petroleum), solvent-dewaxed heavy paraffinic	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo  Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/summary: Not available

Carcinogenicity:

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Negative – Dermal – TC	Mouse - female	--	78 weeks

Conclusion/summary: Not available

Reproductive toxicity:

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Negative	Negative	Negative	Rat – male, female	Oral: 1000 mg/kg	--

Conclusion/summary: Not available

Teratogenicity:

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Negative – Dermal	Rat	2.000 mg/kg	7 days per week

Conclusion/summary: Not available

Specific target organ toxicity (single exposure):

Not available

Specific target organ toxicity (repeated exposure):

Not available

Aspiration hazard:

Product/ingredient name	Result
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	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:

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Sub-chronic NOAEL Oral	Rat – male, female	≥ 2.000 mg/kg	13 weeks; 5 days per week
	Sub-acute LOAEL Oral	Rat – male	125 mg/kg	13 weeks; 5 hours per day
	Sub-acute NOAEL Inhalation dusts and mists	Rat - male	> 980 mg/m <sup>3</sup>	4 weeks; 5 days per week

Conclusion/Summary: Not available  
 General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.  
 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

## Section 12. Ecological information.

12.1 Toxicity:  
 Conclusion/Summary: Not available

12.2 Persistence and degradability:  
 Conclusion/Summary: Not available

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), solvent-dewaxed heavy paraffinic	--	--	Inherent

12.3 Bioaccumulative potential: Not available

Product/ingredient name	LogP <sub>ow</sub>	BCR	Potential
Distillates (petroleum), solvent-dewaxed heavy paraffinic	> 3	--	Low

12.4 Mobility in soil:  
 Soil/water partition coefficient (K<sub>oc</sub>): 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.

## Section 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 non-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 spilled material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information.

14.1 UN number:	
ADR/RID, ADN/ADNR, IMDG, IATA:	Not regulated
14.2 UN proper shipping name:	
ADR/RID, ADN/ADNR, IMDG, IATA:	--
14.3 Transport hazard class(es):	
ADR/RID, ADN/ADNR, IMDG, IATA:	--
14.4 Packing group:	
ADR/RID, ADN/ADNR, IMDG, IATA:	--
14.5 Environmental hazards:	
ADR/RID, ADN/ADNR, IMDG, IATA:	No
Additional information:	
ADR/RID, ADN/ADNR, 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

### Section 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.
Water hazardous class (WGK):	2 Appendix No. 4
International regulations:	
Chemical Weapons Convention List Schedule I, II & III Chemicals:	Not listed
Montreal Protocol (Annexes A, B, C, E):	Not listed
Stockholm Convention on Persistent Organic Pollutants:	Not listed
Rotterdam Convention on Prior Inform Consent (PIC):	Not listed
UNECE Aarhus Protocol on POPs and Heavy Metals:	Not listed



International lists:

National inventory:

Australia: Not determined  
Canada: Not determined  
China: Not determined  
Japan: Not determined  
Malaysia: Not determined  
New Zealand: Not determined  
Philippines: Not determined  
Republic of Korea: Not determined  
Taiwan: Not determined  
United States: Not determined

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

### Section 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.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]:

Classification	Justification
Not classified	

Full text of abbreviated H-statements: H304 May be fatal if swallowed and enters airways  
H315 Causes skin irritation  
H411 toxic to aquatic life with long lasting effects

Full text of classifications [CLP/GHS]: Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM) – Category 2  
Asp. Tox. 1, H304 ASPIRATION HAZARD – Category 1  
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION – Category 2

Full text of abbreviated R-phrases: R38 Irritating 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 to the environment

Changes: 1 - 16