



EXO Automotive Spa  
Via San Marco, 11c int.69  
35129 – Padova Italy  
ph +39 049 744 99 70

# Technical Product Sheet



## PACKAGING :

PRODUCT		
<b>Appearance:</b>	1-litre plastic tub	4-litres plastic tub
<b>Code:</b>	<b>EOS1040.01</b>	<b>EOS1040.04</b>
<b>Barcode (EAN13)</b>	8059267044366	8059267066979

## DESCRIPTION:

A semi-synthetic oil that exceeds the most important automotive industry specifications.

## FEATURES:

A balanced selection of base oils and carefully selected additives ensure:

- maximum engine protection;
- excellent lubrication under all conditions;
- low viscosity when cold for reduced fuel consumption;
- low evaporation for reduced oil consumption



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# Technical Product Sheet



## CONFORMITY:

INTERNATIONAL SPECIFICATIONS	
ACEA	A3/B4
API	SL/CF

CONFORMS TO THE FOLLOWING PERFORMANCE REQUIREMENTS		
MB (Mercedes Benz)	229.1	
VW (Volkswagen)	501.01	505.00

## DETAILS:

TYPICAL CHARACTERISTICS			
Characteristics	Method	Typical values	Unit of measurement
Density at 20°C	ASTM-D-4052	0,864	kg/l
Viscosity at 100°C	ASTM-D-445	13,92	cSt
Viscosity index	ASTM-D-2270	155	
C.O.C. inflammability	ASTM-D-92	228	°C
Pour point	ASTM-D-97	-33	°C

## NOTE:

*The above data are not a specification and are subject to normal production tolerance values. Considering the multiple possible applications and the possible interference by elements in no way related to us, we cannot be held in any way liable for results and experimental tests carried out at the sole risk of the user.*



## MSDS

according to EC Regulation 1907/2006  
and seq. amendments (Regulation n.453/2010)

Update N. 03 of 07/09/2017  
Sheet created on:18/11/2014



# OP SINT SEMI-SYNTHETIC SAE 10W-40

## 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND COMPANY

### 1.1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE

<b>Substance / Mixture</b>	OP SINT SEMI-SYNTHETIC SAE 10W-40
<b>Synonyms</b>	
<b>CAS Number</b>	not applicable
<b>CE Number</b>	not applicable
<b>INDEX Number</b>	not applicable
<b>Num.Registr.REACH</b>	not applicable
<b>Chemical Formula</b>	
<b>Molecular Weight</b>	not applicable

### 1.2 Use of substance / preparation

**Common use** Semi-synthetic lubricant for 4 stroke gasoline or diesel engines

#### Identified uses of the chemical safety report


### 1.3 Company Identification

<b>Company:</b>	<b>EXO Automotive Spa</b>
<b>Address</b>	Via San Marco 11c int. 69
<b>Town / Country</b>	Padova / Italy
<b>Telephone num.</b>	+39 049 744 99 70
<b>Note</b>	Office hours: from Monday to Friday 9:00 ÷ 13:00 and 14:00 ÷ 18:00
<b>E-mail address</b>	info@exoautomotive.it

### 1.4 Emergency telephone number

<b>Emergency Phone</b>	Italy: +39 049 744 99 70 (Office hours: from Monday to Friday 9:00 ÷ 13:00 and 14:00 ÷ 18:00)
	Italy: Poison Information Centre - Ospedale Maggiore di Milano (Niguarda): 02 66101029 (24h)
	Foreign countries: Contact the closest Poisons Information Centre



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<p><b>OP SINT SEMI-SYNTHETIC SAE 10W-40</b></p>		

**2 - HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Hazards** Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Eye Irrit. 2; H319

Classification according to Directive No. 1999/45/EC

-

Prolonged direct contact may cause eye and skin irritation.

**2.2 Label elements**

**Pictogram**



GHS07

**Signal word** WARNING

**HAZARDS IDENTIFICATION**

**H319** Causes serious eye damage

**SAFETY ADVICE**

**General**

**Prevention**

**P264** Wash hands thoroughly after use

**P280** Wear protective gloves/protective clothing/eye protection/face protection

**Reaction**

**P305 + P351 + P338** IF IN EYES: Rinse continuously 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

**Storage**


**Disposal**

**P501** Dispose of contents/container to hazardous waste in accordance with local, state or national legislation

**NOTE**

**OTHER INFORMATIONS** not available



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### 2.3 Other hazards

**Other hazards**

This mixture does not meet the criteria for classification as PBT or vPvB according to Annex XIII of Regulation (EC) n. 1907/2006.

**Chemical and physical hazards:** if involved in a fire, the product may be subject to combustion. Thermal decomposition gives rise to flammable and toxic fumes, or vapors.

**Health hazards:** prolonged or repeated contact may irritate the skin and eye. Ingestion may cause gastric and intestinal irritation.

**Environmental hazards:** release to the environment can cause negative impact, particularly on aquatic organisms.

## 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance

**Substance composition** n.a.

### 3.2 Mixture

**Mixture Composition**


Mixture of synthetic and severely solvent refined paraffinic oils with the addition of multi-function technology additive.

The DMSO extract value of used mineral base oils is less than 3% (determined through the IP 346 method). They are therefore classified as non-carcinogenic according to Note L (Directive 94/69 / CE - Regulation (CE) No 1272/2008).

**Main components:**

Name	Quantities %	CAS	EC	REACH Registration number	Index	Classification
Lubricating oils (petroleum), C <sub>24-50</sub> , solvent-extd., dewaxed, hydrogenated	67.10	101316-72-7	309-877-7	01-2119489969-06	649-530-00-X	Nota L
Lubricating oils (petroleum), C <sub>20-50</sub> , hydrotreated neutral oil-based	9.90	72623-87-1	276-738-4	01-2119474889-13	649-483-00-5	Nota L



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**Hazardous classified components:**

Name	Quantities %	CAS	EC	REACH Registration number	Index	Classification
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	1.095 - 2.19	93819-94-4	298-577-9	01-2119543726-33	-	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411
Phenol, dodecyl-, branched	0.033 - 0.1095	121158-58-5	310-154-3	01-2119513207-49	-	Skin Corr. 1C; H314 Eye Dam. 1; H318 Repr. 2; H360f Aquatic Acute 1; H400 Aquatic Chronic 1; H410*

\* M-Factor = 10

According to the additive supplier's declaration: the "Phenol, dodecyl-, branched" is present as an impurity of dodecylphenol intermediate used in the preparation of the additive. Although EU legislation foresees to consider the impurities in the assignment of the classification and labeling, experimental data of the manufacturer on the intermediate exclude the hazardous to aquatic organisms at used concentrations.

The mixture does not contain other dangerous substances in concentrations that would require mention.

The full text of risk phrases and the Notes is specified in section 16.

#### 4 - FIRST AID

**4.1 Description of first aid measure**

**Eye contact:**

- Rinse immediately with plenty of water for a few minutes holding open eyelid.
- Remove contact lenses if easy to do.

**Skin contact:**


- Take off immediately all contaminated clothing and wash with plenty of soap and water.

**General warning:** During accidents with pipes under pressure and similar, any substance can accidentally be injected into tissues under the skin, even without apparent surface damage. In that case, the injured person must be taken to hospital immediately for suitable care. Do not wait for symptoms to develop.

**Inhalation:**

- If exposed to high concentration of vapours and mists, take the person away from the



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contaminated area to a well ventilated area.

- If breathing is difficult, give oxygen if possible, or assisted ventilation (no mouth-to-mouth ventilation). Consult a doctor if necessary.

**Ingestion:**

- Do not cause the vomit in order to avoid aspiration of the substance through the respiratory tract. Consult for a doctor.

**4.2 Major symptoms and effects, both acute and delayed**

The product is not harmful, based on the present state of our knowledge.

No specific hazard under normal conditions of use.

Dry skin, irritation to skin and eyes may arise in the case of repeated or prolonged exposure.

**4.3 Statement of the need to consult a doctor immediately or special treatments**

Seek immediate medical advice after eye contact, for persistent irritation to the skin and after ingestion.

Get medical attention if breathing is difficult. Induce vomiting only if indicated by your doctor.

**5 - FIREFIGHTING MEASURES**

**5.1 Extinguishing Media**

**Suitable extinguishing media:** Use extinguishing devices for class B fires: carbon dioxide (CO<sub>2</sub>), foam, sand, earth, dry chemical powder, and water spray, unless otherwise stated.

**Unsuitable extinguishing media:** Avoid using water jets. Only use water jets to cool surfaces of containers exposed to fire.

**NOTE:**

*Cool with water the containers not involved in the fire but exposed to heat, to avoid explosions and the propagation of the fire.*

**5.2 Special hazards arising from the substance or mixture**


The use in pressurized equipment can lead to the formation of aerosols that may catch fire, under suitable conditions of initiation.

Avoid breathing combustion fumes because a fire produces hazardous combustion products such as metal oxides, hydrogen sulfide (H<sub>2</sub>S), sulfur oxides (SO<sub>x</sub>), phosphorus oxides and other derivatives potentially dangerous, such as carbon oxides (CO<sub>x</sub>), unburned hydrocarbons and chlorinated compounds.

**5.3 Advice for fire-fighters**

**Protective Equipment:** Wear full fire resistant self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. The equipment must comply to the standard EN and used in conditions of maximum protection on the basis of the information given in the previous sub-sections.



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## 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Keep non-involved personnel away from the area of spillage.

Ventilate area.

Prevent formation of aerosols and vapors from pressurized equipment.

Eliminate sources of ignition.

Avoid contact with skin, eyes by wearing appropriate protective clothing.

Make sure that equipment is available for cooling the vessels, to prevent the danger of overpressure and overheating in the event of fire in the vicinity.

Leaks of the substance on the floor may cause risk of slipping.

**Respiratory protection:**in the event of exposure to oil mists in relatively high concentration, use masks with specific filter for organic vapors and aerosols (UNI EN 140 and 141).

**Eye protection:**Wear safety goggles (UNI EN 166).

**Skin protection:**Use rubber gloves or PVC (UNI EN 374). Wear suitable protective clothing (UNI EN 465, 466, and 467). Use barrier creams if protective gloves are not appropriate.

### 6.2 Environmental precautions

Avoid the product being dispersed or flowing into the ground, the sewers and surface waters. If necessary inform competent local authorities.

### 6.3 Methods and material for containment and cleaning up

Contain the spreading of small product quantities with earth, sand or other inert absorbent material. Dyke great leakages of product. Collect with liquid-absorbent materials or suction means. Transfer the waste into suitable impermeable containers, able to store and transport the material collected. Dispose of it according to the legislation in force.

### 6.4 Reference to other sections

See also sections 8 (personal protective equipment), 12 (ecology) and 13 (disposal).

## 7 - HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Use of personal protective equipment must be consistent with good occupational hygiene practices.


Avoid direct contact with skin, eyes and clothing.

Avoid breathing aerosols or vapours of product.

Assuring a correct ventilation of the working place, especially if this latter is restricted.





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Do not reuse contaminated clothing.

Do not eat, drink or smoke while handling.

Do not smoke or use flames; avoid contact with sparks or possible sources of ignition.

Wash hands thoroughly with soap and water before meals and after work shift.

**7.2 Conditions for safe storage including any incompatibilities**

The product is stable under normal conditions of use and storage.

Keep the product in its original containers, stored in an environment and under conditions that assure control and containment of leakage.

Keep containers tightly closed.

Store in a cool place, far from heat sources or of possible ignition source and from direct exposure to sunrays.

Assure adequate ventilation of premises.

Avoid accumulating electrostatic charges.

**7.3 Specific end use(s)**

For recommendations on the end uses listed, no additional information is needed.

Specific use: Before using the product for uses other than those specified, refer to the laws and technical considerations, and take the appropriate measures of good operational practice.

**8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control Parameter**

**Control parameter**

*Exposure limit values (mixture components - ACGIH 2014):*

- TLV TWA: 5 mg/m<sup>3</sup> (Mineral oil, pure, highly and severely refined)

- TLV STEL: not available

**DNEL (derived no effect level) / DMEL (Derived Minimal Effect Level):**

Distillates (petroleum), solvent-dewaxed heavy paraffinic EC 265-169-7


Workers

DNEL Inhalation , Long-term local effects :5,4 mg/m<sup>3</sup>

Consumers

DNEL Inhalation, Long-term local effects: 1,2 mg/m<sup>3</sup>



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Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) EC 298-577-9

Workers

DNEL Inhalation, Long-term systemic effects: 8,31 mg/m<sup>3</sup>  
 DNEL Skin contact, Long-term systemic effects: 0,58 mg/kg  
 Consumers  
 DNEL Inhalation, Long-term systemic effects: 2,11 mg/m<sup>3</sup>  
 DNEL Skin contact, Long-term systemic effects: 0,29 mg/kg  
 DNEL Ingestion, Long-term systemic effects: 0,24 mg/kg

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased EC 272-234-3

Workers

DNEL Inhalation, Long-term systemic effects : 70,52 mg/m<sup>3</sup>  
 DNEL Inhalation, Acute systemic effects: 167 mg/m<sup>3</sup>  
 DNEL Skin contact, Long-term systemic effects: 20,8 mg/kg  
 DNEL Skin contact, Acute systemic effects: 80 mg/kg  
 Consumers  
 DNEL Inhalation, Long-term systemic effects: 52,6 mg/m<sup>3</sup>  
 DNEL Inhalation , Acute systemic effects: 0,167 mg/m<sup>3</sup>  
 DNEL Skin contact, Long-term systemic effects: 10,42 mg/kg  
 DNEL Skin contact , Acute systemic effects: 40 mg/kg  
 DNEL Ingestion , Long-term systemic effects: 5 mg/kg  
 DNEL Ingestion, Acute systemic effects: 50 mg/kg

**PNEC(S) (Predicted No Effect Concentration):**

Distillates (petroleum), solvent-dewaxed heavy paraffinic EC 265-169-7

PNEC Oral: 9,33 mg/kg

Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) EC 298-577-9

PNEC Fresh water: 0,004 mg/l  
 PNEC Marine water: 0,0046 mg/l  
 PNEC Intermittent use/release: 0,021 mg/l  
 PNEC Sewage treatment plant: 100 mg/l  
 PNEC Fresh water sediment : 0,0116 mg/kg  
 PNEC Marine sediment: 0,00116 mg/kg  
 PNEC Soil: 0,00528 mg/kg  
 PNEC Oral : 10,67 mg/kg


Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased EC 272-234-3

PNEC Fresh water: 0,5 mg/l  
 PNEC Marine water: 0,04 mg/l  
 PNEC Fresh water sediment: 43500 mg/kg  
 PNEC Marine sediment: 3480 mg/kg  
 PNEC Sewage treatment plant: 100 mg/l  
 PNEC Soil: 8850 mg/kg  
 PNEC Secondary Poisoning : 13,333 mg/kg food

*Monitoring procedures:*

Refer to Directive 89/391/EEC.



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## 8.2 Exposure Controls

### 8.2.1 *Appropriate engineering controls*

No special requirements under normal conditions of use. Refer to the good operational, environmental, health and safety standards.

Avoid mist and aerosol production and their diffusion through shielding (if appropriate) of the machines, and through the use of localized ventilation/aspiration.

Organize the activities with equipment suitable for the purpose. Employ personnel trained and informed about the operational procedures.

### 8.2.2 *Personal protection measures, such as personal protective equipment*

**a) Eye / Face Protection** Wear safety goggles when contact with the product is possible (UNI EN 166).

**b) Skin Protection** Wear rubber or synthetic gloves, resistant to mineral oils or solvents (UNI EN 374).

The choice of protective gloves also depends on use conditions and must follow manufacturer indications.

Gloves must be replaced at first signs of wear. Put on gloves after washing hands carefully.

The use of barrier creams can be a useful protection instrument.

Wear overalls or aprons made of a suitable material; change immediately contaminated clothing and wash it carefully before using it again (UNI EN 465, 466, and 467).

### **c) Respiratory Protection**

None required under normal conditions of use.

Avoid inhalation of vapors and aerosols; respiratory protection: In the event of exposure to oil mists at relatively high concentration, use masks with specific filter for organic vapor and dust/mist (UNI EN 140 and 141).

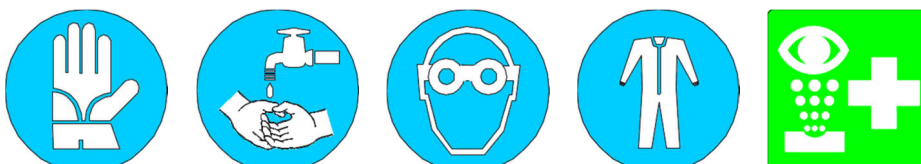
### **d) Heat Dangers**

None under normal conditions of use.

### 8.2.3 *Environmental Exposure Controls*

Take all the technical precautions necessary to prevent the spread of the product into the surrounding. Operate only in an appropriate area, provided with containment systems and means for the emergency intervention (see point 6). Refer to local regulations for pollution of air, soil and water.

### Pictogram: DPI





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## 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>a) Appearance</b>	<i>Physical state at 20°C:</i> Liquid		
	<i>Color ASTM D 1500:</i> L 2,5		
<b>b) Odour</b>	Typical		
<b>c) Olfactory threshold</b>	not available		
<b>d) pH</b>	not applicable		
<b>e) Melting / Freezing Point °C</b>	-33	<b>Note</b>	ASTM D 97
<b>f) Initial boiling point and boiling range °C</b>		<b>Note</b>	not available
<b>g) Flash point °C</b>	228	<b>Note</b>	ASTM D 92
<b>h) Evaporation rate</b>	not applicable		
<b>i) Flammability solid / gas °C</b>	-	<b>Note</b>	not applicable
<b>j) Upper / Lower Flammable or Explosive</b>	not available		
<b>k) Vapour pressure</b>	not applicable		
<b>l) Vapor density</b>	not applicable		
<b>m) Relative density</b>	0.864 kg/l @ 20°C (ASTM D 4052)		
<b>n) The Solubility / solubility of the</b>	Insoluble in water.		
<b>o) Partition Coefficient n-octanol/water</b>	not available		
<b>p) Auto-ignition temperature °C</b>	not available		
<b>q) Decomposition temperature °C</b>	not available		
<b>r) Viscosity</b>	91.07 cS @ 40°C and 13.92 cS @ 100°C (ASTM D 445)		
	CCS 5370 cP @ -25°C (ASTM D 2602)		
<b>s) Explosive properties</b>	not available		
<b>t) Oxidising properties</b>	not available		

### 9.2 Other information

<b>Conductivity</b>	not available
<b>Gas Group</b>	not applicable
<b>Other information</b>	<i>Pour point ASTM D 97:</i> -33°C
	<i>Viscosity index:</i> 155



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## 10 - STABILITY AND REACTIVITY

- 10.1 Reactivity** The substance does not present additional dangers of reactivity than those reported in the next subtitles.
- 10.2 Chemical Stability** The product is stable under normal conditions of use and storage. View the data sheet.
- 10.3 Possibility of hazardous reactions** None.
- 10.4 Conditions to avoid** Use in extreme temperatures.
- 10.5 Incompatible materials** Avoid contact with acids and strong bases and oxidizing agents.
- 10.6 Hazardous Decomposition Products** On thermal decomposition vapors and fumes, flammable, acres and dangerous to health may be released. See also section 5.

## 11 - TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Symptomatology** There are no experimental studies of the mixture itself. Therefore, we examined the concentration of each component to assess toxicological effects resulting from exposure to the product.

The health risks shown are derived from the current knowledge on the toxicity of the base oils and additives used in relation to the concentration in the finished product that results in the classification.

#### General warning

High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

### Class of relevant risk for the substance:


a) **Acute toxicity:** Specific Data not available

#### Other toxicity values

Acute toxicity data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Exposure routes	Dose	Reference
rat <i>Sprague-Dawley</i>	oral	DL <sub>50</sub> >5000 mg/kg bw	Test OECD 401/420 Registration dossier
rat <i>Sprague-Dawley</i>	inhalation	CL <sub>50</sub> >5.53 mg/L air	Test OECD 403 Registration dossier
rabbit <i>New Zeland White</i>	dermal	DL <sub>50</sub> >5000 mg/kg bw	Test OECD 402 Registration dossier



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**b) Skin corrosion / irritation**

Irritation data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Exposure routes	Effect	Reference
rabbit New Zeland White	dermal	Not irritating	Registration dossier

- Frequent and prolonged contacts may degrease and irritate the skin, also causing dermatitis by removal of the hydrolipidic layer and produce skin dryness.

**c) Serious eye damage / serious eye irritation**

Irritation data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Exposure routes	Effect	Reference
rabbit New Zeland White	ocular	Not irritating	Test OECD 405 Registration dossier

Irritation data of the main component zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate):

Risk of serious damage to eyes.

The finished product is classified as irritating to eyes:

Eye Irrit. 2; H319


**d) Respiratory / skin sensitization**

Sensitisation data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Exposure routes	Effect	Reference
guinea pig Hartley	maximisation test/ intradermal and epicutaneous	Non sensitizing	Test OECD 406 Registration dossier

So far, there are no reports of skin sensitization resulting from use of the product.



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**e) Germ cell mutagenicity**

Mutagenicity data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Effect	Reference
Chinese hamster Ovary cells	Not mutagenic	Test OECD 473 Registration dossier
S. typhimurium TA 98	Not mutagenic	Test OECD 471 Registration dossier

No significant mutagenicity data are available for this product's components.

**f) Carcinogenicity**

Carcinogenicity data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Effect	Reference
mouse (female) CF1	Not carcinogenic	Test OECD 451 Registration dossier

No significant carcinogenicity data are available for this product's components.


**g) Reproductive toxicity**

Reproductive toxicity data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Effect	Reference
rat CD BR Sprague-Dawley	No effects on reproduction and development	Test OECD 421 Registration dossier
rat Sprague-Dawley	No effects on reproduction and development	Test OECD 414 Registration dossier

The mixture contains a component, branched dodecyl phenol, CE 310 -154-3 classified Repr.1B;H360F,May damage fertility, since the It's concentration is below 0.3% (Tab.3.7.2 CLP Reg. 1272/2008 and s.m.i.) this product is not classified for fertility effects.



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**h) Specific target organ toxicity (STOT)-Single exposure-**

- Prolonged exposure to vapours or mists of product may cause irritation of the breathing apparatus.
- In case of product nebulization, irritation of the respiratory tract may occur. In case of overexposure to fumes and mists of the product headache, nausea, irritation of the eyes and respiratory tract, may occur.
- If swallowed, the product may irritate the digestive apparatus causing vomit, nausea and diarrhoea. If vomiting occurs, the product may enter into the respiratory tract and can cause serious damage to the respiratory system; therefore, if swallowed, do not induce vomiting but seek immediate emergency.

**i) Specific target organ toxicity (STOT)-Repeated exposure-**

Repeated toxicity data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Species	Exposure routes	NOEL	Reference
rabbit New Zeland White	dermal	1000 mg/kg bw/day (male) 1000 mg/kg bw/day (female)	Test OECD 410 Registration dossier
rat Sprague-Dawley	dermal	≥ 2000 mg/kg bw/day	Test OECD 411 Registration dossier

No significant repeated toxicity data are available for this product's components.

**j) Aspiration hazard**

No data available

**Toxicokinetics, metabolism and distribution effects**


No data available

**Other information**

No data available





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## 12 - ECOLOGICAL INFORMATION

### Ecological Information

Studies on the separate components showed no consistent evidence of eco-toxicity at concentrations used in the mixture, thus any classification in accordance with the regulations on hazardous substances has not been assigned.

Use this product according to good working practices. Avoid littering.

Notify the competent authorities if product has entered water course or sewers or contaminate soil or vegetation.

The product can also cause significant adverse impact on activated sludge of Sewage Treatment Plant.

### 12.1 Toxicity


Toxicity data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Endpoint	Result	Reference
Toxicity to fish <i>Pimephales promelas</i>	LL <sub>50</sub> ≥ 100 mg/L WAF 96 h	Test OECD 203 Registration dossier
Toxicity to invertebrates <i>Daphnia magna</i>	EL <sub>50</sub> > 10000 mg/L WAF 48 h	Test OECD 202 Registration dossier
Toxicity to algae and cyanobacteria	EL <sub>50</sub> ≥ 100 mg/L WAF 72 h	Test OECD 201 Registration dossier
Toxicity to microorganisms	NOEL > 1.93 mg/L	Registration dossier

Toxicity data listed in the registration dossier of Phenol, dodecyl-, branched:

Endpoint	Result	Reference
Toxicity to fish <i>Pimephales promelas</i>	LC <sub>50</sub> = 40 mg/l WAF 96 h NOEC = 25 mg/l	Test OECD 203 Registration dossier
Toxicity to invertebrates <i>Daphnia magna</i>	EC <sub>50</sub> = 0.037mg/l 48h NOEC = 0.011 mg/l	Test OECD 202 Registration dossier
Toxicity to algae and cyanobacteria	EbC <sub>50</sub> = 0.15 mg/l 72 h ErC <sub>50</sub> = 0.36 mg/l 0 - 72 h NOEC = 0.070 mg/l	Test OECD 201 Registration dossier
Toxicity to microorganisms	EC <sub>50</sub> > 1000 mg/l NOEC = 1000 mg/l	Test OECD 209 Registration dossier



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**12.2 Persistence and degradability**

Data listed in the registration dossier of the main component of the mixture (Lubricating oils (petroleum), C<sub>24-50</sub>, solvent-extd., dewaxed, hydrogenated):

Endpoint	Result	Reference
Ready biodegradability in water	Inherently biodegradable	Test OECD 301 F Registration dossier

Toxicity data listed in the registration dossier of Phenol, dodecyl-, branched:

Endpoint	Result	Reference
Ready biodegradability in water	Biodegradation is not observed	Test OECD 301 B Registration dossier

The final product is considered to be poorly biodegradable, particularly in soil.

**12.3 Bioaccumulative potential**

Bioaccumulation may occurs in aquatic sediments and sludge of Sewage Treatment Plant.

Data listed in the registration dossier of Phenol, dodecyl-, branched:

Endpoint	Duration (days)	Log K <sub>ow</sub> or BCF	Reference
BCF	27	2.9	SDS supplier
Log K <sub>ow</sub>	0.1	7.1	SDS supplier

**12.4 Mobility in soil**

- Product floats on water.
- Product is absorbed from the soil surface.
- Product is conveyed from the water surface, while it is absorbed and retained by the soil.

**12.5 Results of PBT assessment**


This mixture does not meet the criteria for classification as PBT or vPvB according to Annex XIII of Regulation (EC) n. 1907/2006.

**Ecological Information**

No data available

**12.6 Other harmful effects** No data available



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**13 - DISPOSAL CONSIDERATIONS**

**13.1 Methods of waste treatment** Do not discharge in sewers, underground passages or waterways. Respect the laws in force.  
Dispose of exhausted products (and emulsions) and containers according to local or national legislations through an authorized waste disposal contractor.

**14 - TRANSPORT INFORMATION**

*The substance itself is not considered dangerous within the meaning of the regulations governing the transport of dangerous goods by road (ADR), rail (RID), sea (IMDG Code) and by air (IATA)*

**15 - REGULATORY INFORMATION**

**15.1 Standards and legislation on health, safety and environmental specifications for the substance or mixture**

<b>Restrictions on the use under Title VII of the REACH Regulation (EC Regulation 1907/2006 and s.a.</b>	Mixture: Entry 3: liquid substances or mixtures, dangerous Phenol, dodecyl-, branched: Appendix 6 Entry 30 — Toxic o reproduction category 1B
<b>Authorization under REACH (Regulation EC 1907/2006 and subsequent amendments):</b>	mixture not subjected


**Other EU directives**

<b>Seveso Directive (Dir 96/82/EC and Dir 105/2003/CE):</b>	mixture not subjected
<b>Chemical Agents Directive (Dir.98/24/CE):</b>	non-hazardous chemical
<b>Carcinogens Directive and / or mutagens (Dir 97/42/EC and 99/38/EC):</b>	not carcinogenic/mutagenic mixture
<b>Note:</b>	No data available

**15.2 Chemical Safety Assessment**

**Chemical Safety Assessments** A Chemical Safety Assessment has not been carried out for this mixture: Information for safe handling of the product, arising from Exposure Scenarios for the hazardous substances contained, have been integrated in the into the core Sections 1-16 of this Safety Data Sheet.



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## 16 - OTHER INFORMATION

**List of relevant phrases**      *List of relevant H-phrases, hazard statements, reported:*

H315: Causes skin irritation  
H318: Causes serious eye damage  
H319: Causes serious eye irritation  
H360f: May damage fertility  
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

**Note L:** The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

**Guidelines for the formation**

Adequately train workers that will potentially be exposed to these substances, based on the contents of this safety data sheet.

**More information**

Procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP].

Eye Irrit. Cat 2; H319 Calculation method tab. 3.3.3. CLP and f.a.

Do not use the product for uses that are not indicated. In this case, the user could be subject to unforeseen risks.

Refer to product technical details. Technical contact center: Tel : +39 049 744 99 71 (Lubricants sector).

**Bibliography**

EINECS


**Additional Bibliography**

Internal cards. Safety Data Sheets of supplied raw materials.

The information has been drafted to the best of our knowledge. It is for information purposes and is not a guarantee. The product is used under User control and it is their responsibility to adapt to the correct usage conditions indicated on the SDS and to adapt to suitable industrial hygiene practice. This document does not replace the chemical risk analysis which is the employer's complete responsibility.

This card was drawn up following the guidelines for drawing up SDS for lubricants drafted by the Group of Lubrication Industry Companies (Gail) – Website: <http://aispec.federchimica.it>



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<b>Update Num.</b>	03

**\*\* n.a. = Not Applicable n.c. = Not Communicated**

**The various signs (such as \*, \*\*) indicate the sections shown notes on specific classification information or differences from the conversion from the DIR reg CLP (see Part I of the All.VI Reg 1272/2008).**

**This sheet replaces those issued in the previous date. The information has been drafted to the best of our knowledge in the field of health, safety and environment, and is intended to enable users of the product - under whose control it takes the use - identify the protective and preventive behaviors useful for a safe operation. The user of the product, prior to uses other than those provided, must see if are needed more information, always considering compliance with the applicable provisions of law and good operational practice. This document does not replace the chemical risk analysis which is the employer's complete responsibility. Are not assumed responsibility in respect of any improper use of the product. The characteristics mentioned should not be considered as a guarantee of specific properties of the product.**