

## Safety Data Sheet

### 1. Identification of the substance/mixture and of the Company

- 1.1. Product identifier
- 1.1.1 Product name **Synthetic Technology Engine Oil**
- 1.1.2 Trade name **CO5W40**
- 1.2. Relevant identified uses of the substance/mixture and use advised against **Main uses: 4 stroke engine lubrication**
- 1.3 Details of the supplier of the safety data sheet

### 2. Hazard identification

#### 2.1. Classification of the mixture

- 2.1.2. Classification according to Regulation (EC) No. 1272/2008 [CLP]  
Eye Irrit. 2 H319  
Full text of H-phrases: see section 16.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):



GHS07

CLP Signal word:

Warning

- Hazardous ingredients and/or with relevant occupational exposure limits: Zinc Alkyl Dithiophosphate.
- Hazard statements (CLP): H319 - Causes serious eye irritation.
- Precautionary statements (CLP): P264 - Wash the hands thoroughly after handling.  
P280 - Wear Eye protection, Gloves.  
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
- EUH phrases: EUH208 - Contains Benzenesulfonic Acid, Calcium Salt. May produce an allergic reaction.
- 2.3. Other hazards: None

### 3. Composition/information on ingredients

- 3.1. Substances Not applicable.
- 3.2. Mixtures Mineral base oil. Synthetic technology base oil. Additives.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
LUBRICATING BASE OIL	EINECS: 278-012-2 REACH registration number 01-2119495601-36-0009 EINECS: 265-157-1 REACH registration number 01-2119484627-25	80.75	Not classified
ZINC ALKYL DITHIOPHOSPHATE	EINECS: 283-392-8 REACH registration number 01-2119493626-26	0.64 – 1.29	Aquatic Chronic 2; H 411 Eye Dam. 1; H 318 Skin Irrit. 2; H 315
ETHYLENE-PROPYLENE POLYMER	EINECS: Polymer REACH registration number Not applicable	1.98	Not classified

PHENOL DODECYL, BRANCHED	EINECS: 310-154-3 REACH registration number 01-2119513207-49	0.007 – 0.06	Aquatic Acute 1; H 400 Aquatic Chronic 1; H 410 Eye Irrit. 2; H 319
BENZENESULFONIC ACID, CALCIUM SALT	EINECS: 274-263-7 REACH registration number 01-2119492616-28	0.1 – 0.15	Skin Sens.1; H 317
METHACRYLIC POLYMER	EINECS: Polymer REACH registration number Not applicable	0.09 – 0.21	Not classified

See Section 16 for the full text of H and EUH-phrases mentioned above.

## 4. First-aid measures

### 4.1. Description of first aid measures

#### 4.1.1 Inhalation

If an exposure to high-concentrated oil mists occurs, move the patient to fresh air. If liquid is inhaled, take to hospital immediately.

#### 4.1.2 Skin contact

Wash skin thoroughly with water and soap.

#### 4.1.3 Eye contact

Immediately flush eyes with large amounts of water.

#### 4.1.4 Ingestion

Do not induce vomiting. Call a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

Not applicable

### 4.3. Indication of any immediate medical attention and special treatment needed

Depending on the exposure level, it is recommended periodical medical checks.

## 5. Firefighting measures

### 5.1. Extinguishing media

#### 5.1.2 Recommended

Carbon Dioxide, foams, powders.

#### 5.1.3 Forbidden

Water jets.

### 5.2. Special hazards arising from the substance or mixture

In case of combustion, it may generate dangerous smokes of carbon monoxide, carbon dioxide, unburnt hydrocarbon flue gas and other pyrolysis products.

### 5.3. Advice for firefighters

#### 5.3.1 Personnel equipment

Oxygen breathing set and protective clothes.

#### 5.3.2 Other recommendations

Cool the tanks by water jet.

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## 6. Accidental release measure

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| 6.1. Personal precautions, protective equipment and emergency procedure | Remove ignition sources, provision sufficient ventilation.<br>Wear suitable protective equipment to prevent any contamination of skin, eyes and personal clothing. |
| 6.2. Environmental precaution   | Do not allow product to enter sewers or watercourses.<br>Notify appropriate authorities in case of spill/leakage.  |
| 6.3. Methods and material for containment and clearing up               |  |
| 6.3.1 Advice to contain a spill   | Dike area of spill.  |
| 6.3.2 Advice to clean-up a spill  | Recover with any appropriate equipment.<br>Absorb with inert material, i.e.: sand.   |
| 6.4. Reference to other sections  | See Sections 8 and 13.   |

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## 7. Handling and Storage

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| 7.1. Precautions for safe handling           |   |
| 7.1.1 Recommendations                        | Prevent oil mists from generating.<br>Reduce the release of substance to the environment.   |
| 7.1.2 Advice on general occupational hygiene | Don't have any food and beverage in working area. It is recommended to wash hands after use.<br>Undress contaminated safety equipment before having any food. |

7.2.	Condition for safe storage, including any incompatibilities	Keep containers closed when not in use. Do not store open and unlabelled containers. Keep away from flammable materials. Do not store near heat, sparks, open flames and strong oxidizing agents.
7.3.	Specific end use	Not available.

## 8. Exposure control/personal protection

8.1.	Control parameter	
8.1.1	National limit values	
8.1.1.1	National occupational exposure limit in accordance with Directive 98/24/EC	TLV-TWA (A.G.C.I.H),oil mist: 5mg/m <sup>3</sup> TLV-STEL (A.G.C.I.H),oil mist: 10 mg/m <sup>3</sup>
8.1.1.2	National occupational exposure limit values in accordance with Directive 2004/37/EC	Not applicable
8.1.1.3	Any other national occupational exposure limit value	None
8.1.1.4	National biological limit values in accordance with Directive 98/24/EC	Not applicable
8.1.1.5	Any other national biological limit values	Not applicable
8.1.2	Information recommended monitoring procedures provided for the most relevant substances	Not available
8.1.3	Occupational exposure limit values and/or biological limit values for these	Not applicable
8.1.4	Relevant DNELs and PNECs	Not available
8.1.5	Risk management measures	Not applicable
8.2.	Exposure controls	
8.2.1	Appropriate engineering controls	Prevent mist or aerosol from generating.
8.2.2	Individual protection measures, such as personal protective equipment	
8.2.2.1	Eye/face protection	Goggles are suggested.
8.2.2.2	Skin protection	Wear standard working clothing.
8.2.2.3	Respiratory protection	Not necessary under normal use conditions.
8.2.2.4	Hand protection	Mineral oil-proof gloves are suggested.

8.2.3 Environmental exposure controls Do not allow product to soak the soil or enter sewers or watercourses.

## 9. Physical and chemical properties

9.1.	Information on basic physical and chemical properties	
9.1.1	Appearance	
9.1.1.1	Physical state at 20°C and 1013 hPa	Liquid
9.1.1.2	Colour	Dark yellow
9.1.2	Odour	Typical
9.1.3	Odour threshold	Not applicable
9.1.4	pH	Not applicable
9.1.5	Pour point	-27°C Max
9.1.6	Initial boiling point and boiling range	>360°C
9.1.7	Flash point	>215°C
9.1.8	Evaporation rate	Not applicable
9.1.9	Flammability (solid, gas)	Not applicable
9.1.10	Upper/lower flammability or explosive limits	Not applicable
9.1.11	Vapour pressure at 20°C	< 0.01 hPa
9.1.12	Vapour density	>2
9.1.13	Relative density at 15°C	880 Kg/m <sup>3</sup> Max
9.1.14	Solubility in water	Negligible
9.1.15	Partition coefficient : n-octanol/water	Not applicable
9.1.16	Auto-ignition temperature	>325°C
9.1.17	Decomposition temperature	Not applicable
9.1.18	Viscosity at 100°C	12.6 to 16.2 mm <sup>2</sup> /s
9.1.19	Viscosity at 40°C	90 mm <sup>2</sup> /s typical
9.1.20	Explosive properties	Not applicable
9.1.20	Oxidising properties	Not applicable
9.2.	Other Information	
9.2.1	Miscibility	Complete, in hydrocarbons and most of organic solvents.

## 10. Stability and reactivity

10.1.	Reactivity	Not reactive.
10.2.	Chemical stability	The product is stable under normal use and storage conditions.
10.3.	Possibility of hazardous reactions	None.
10.4.	Condition to avoid	Avoid exposure to heat, especially in closed containers.

10.5.	Incompatible materials	Strong oxidizing agents.
10.6.	Hazardous decomposition products	None.

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## 11. Toxicological information

11.1.	Information on toxicological effects	
11.1.1	Acute toxicity	LD <sub>50</sub> (oral): > 5000 mg/Kg bw (not toxic) LD <sub>50</sub> (dermal): > 2000 mg/Kg bw (not toxic) LC <sub>50</sub> (inhalation): > 5000 mg/m <sup>3</sup> air (not toxic)
11.1.2	Skin corrosion/irritation	Not corrosive/not irritating
11.1.3	Serious eye damage/irritation	Not corrosive/not irritating
11.1.4	Respiratory or skin sensitisation	Not sensitising
11.1.5	Germ cell mutagenicity	Genetic toxicity: negative
11.1.6	Carcinogenicity	Not carcinogenic via oral, dermal or inhalation exposures (OECD 453).
11.1.7	Reproductive toxicity	Not reproductive toxicant (OECD 421) (route:oral): NOAEL: 1000 mg/Kg bw/day (route: dermal): NOAEL: 2000 mg/Kg bw/day

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## 12. Ecological information

12.1.	Toxicity	Not toxic
12.2.	Persistence and degradability	Inherently biodegradable, but not readily biodegradable; moderately persistent, particularly in anaerobic conditions.
	Bioaccumulative potential	Being poorly soluble in water, its bio-availability to aquatic organisms is minimal and the bio-accumulation is unlikely.
12.3.	Mobility in soil	Not available
12.4.	Results of PBT and vPvB assessment	Not classified as PBT or vPvB mixture
12.5.	Other adverse effects	None

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## 13. Disposal information

All disposals must comply with Community regulations on this issue except for different National or Regional provisions.

13.1.	Waste treatment methods	Do not dispose of the product, either new or used
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by discharging into sewers, tunnels, lakes, or water courses. Deliver to a qualified official collector.

According to the actual use, this product can be classified with different codes, e.g. in groups 13 and 16 (Ref.: 2001/118/CE). It is not possible to give a general classification: the user has the responsibility of choosing the right code, considering the actual use of the product, alterations and contaminations.

13.2. Disposal of packaging

Dispose of in a safe manner, in accordance with local regulations.

Do not cut, weld, drill, burn or incinerate empty containers or drums unless they have been cleaned and declared safe.

## 14. Transport information

14.1.	UN number	Not applicable
14.2.	UN proper shipping number	Not applicable
14.3.	Transport hazard class	Does not belong to any class of danger.
14.4.	Packing group	Not applicable
14.5.	Environmental hazards	None
14.6.	Special precautions for user	None
14.7.	Transport in bulk according to annex II of MARPOL 73/78 and the IBC Code	Not applicable

## 15. Regulatory information

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

National laws on classification, labelling and packaging of dangerous substances and mixtures (Adoption of Regulation 1272/2008/CE (CLP) and subsequent amendments).

National adoption of Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 97/42/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE.

National adoption of Directive 75/439/CEE, concerning disposal of used oils.

Relevant national laws on recycling and re-use of waste materials.



Relevant national laws on prevention of water Pollution.

15.2. Chemical safety assessment Not available.

## 16. Other information

- 16.1. Additional Data  
 The lubricant base oils used for this final product are subjected to refining treatment, therefore their PAH content (Polycyclic Aromatic Hydrocarbon) according to IP 346 method, is less than 3%.  
 So, they are not classified as carcinogenic according Regulation 1278/2008/EC (CLP) and subsequent amendments.
- 16.2. References to regulations on Material Safety Data Sheet issuing.  
 This sheet has been compiled in compliance with Regulation (EC) 1907/2006-REACH and subsequent amendments and in compliance with Regulation (EC) 1272/2008-CLP and subsequent amendments.
- 16.3. Revision  
 This safety sheet has been updated according to the latest Community directives as far as new regulation references and data are concerned.
- 16.4. Full text of H and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment – acute hazard, category 1.
Aquatic Chronic 1	Hazardous to the aquatic environment – chronic hazard, category 1.
Aquatic Chronic 2	Hazardous to the aquatic environment – chronic hazard, category 2.
Eye Dam. 1	Serious eye damage. Hazard category 1.
Eye Irrit. 2	Serious eye irritation. Hazard category 2.
Repr. 2	Reproductive toxicity. Hazard category 2.
Skin Irrit. 2	Skin irritation. Hazard category 2.
Skin Sens. 1	Skin sensitization. Hazard category 1.
H 315	Causes skin irritation.
H 317	May cause an allergic skin reaction.
H 318	Causes serious eye damage.
H 319	Causes serious eye irritation.
H 361	Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H 400	Very toxic to aquatic life.
H 410	Very toxic to aquatic life with long lasting effects.
H 411	Toxic to aquatic life with long lasting effects.
EUH 208	Contains Benzenesulfonic Acid, Calcium Salt.



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