

## SAE 0W-40

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

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**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet**

Company name: Vierol AG  
 Street: Karlstrasse 19  
 Place: D-26123 Oldenburg  
 Telephone: +49 (0) 441 – 210 20 – 0      Telefax: +49 (0) 441 – 210 20 –111  
 e-mail: info@vierol.de  
 Internet: www.vierol.de  
 Responsible Department: Giftinformationszentrum Nord (Göttingen)  
 +49 (0)551/19240

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**2.2. Label elements****2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Preparation of base oils and additives.

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
93819-94-4	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)			<2,5 %
	298-577-9		01-2119543726-33	
	Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2; H315 H318 H411			
36878-20-3	Reaction product of aminobenzene, N-phenol and branched nonane			<2,5 %
	266-582-5			
	Aquatic Chronic 4; H413			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated, saturated clothing immediately.

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**After inhalation**

Provide fresh air. Call a doctor if you feel unwell.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Foam. Extinguishing powder Carbon dioxide (CO<sub>2</sub>).  
Sand Water spray jet Water mist

**Unsuitable extinguishing media**

High power water jet.

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

Non-flammable. In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>) Carbon monoxide Sulphur dioxide (SO<sub>2</sub>)

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Special danger of slipping by leaking/spilling product. Avoid contact with skin, eyes and clothes.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

**6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Avoid formation of oil dust.

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**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed.

**Hints on joint storage**

Do not store together with: Oxidising agent, strong

**Further information on storage conditions**

Keep at temperature not exceeding 40 °C. Fire class B

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
93819-94-4	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)			
Worker DNEL, long-term	dermal	systemic	0,58 mg/kg bw/day	
Worker DNEL, long-term	inhalation	systemic	8,31 mg/m³	
Consumer DNEL, long-term	dermal	systemic	0,29 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	2,11 mg/m³	
Consumer DNEL, long-term	oral	systemic	0,24 mg/kg bw/day	

**PNEC values**

CAS No	Substance	Value
93819-94-4	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	
Soil	0,00528 mg/kg	

**8.2. Exposure controls****Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

**Eye/face protection**

Wear eye protection/face protection.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Wear suitable protective clothing.

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**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. A2, A2/P2, ABEK

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	brown
Odour:	characteristic

**Test method**

pH-Value:	not determined
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**Changes in the physical state**

Melting point:	not determined
Initial boiling point and boiling range:	280 °C
Pour point:	-54 °C ISO 3016
Kinematic viscosity:	
Flash point:	> 235 °C DIN ISO 2592

**Flammability**

Solid:	not applicable
Gas:	not applicable

**Explosive properties**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits:	0,6 vol. %
Upper explosion limits:	6,5 vol. %

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
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**Oxidizing properties**

Not oxidising.

Vapour pressure:	not determined
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Density (at 20 °C):	0,861 g/cm <sup>3</sup> DIN 51757
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Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
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**Solubility in other solvents**

not determined

Partition coefficient:	not determined
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Vapour density:	not determined
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Evaporation rate:	not determined
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**9.2. Other information**

Solid content:	not determined
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

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**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

Oxidising agent, strong

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

Sulphur oxides Nitrogen oxides (NOx) Carbon monoxide Carbon dioxide

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
93819-94-4	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)				
	oral	LD50 mg/kg	2600	Rat	
	dermal	LD50 mg/kg	>3160	Rabbit	OECD 402

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Additional information on tests**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**Further information**

The product contains less than 3% DMSO extract (method IP346). A classification as a carcinogen with R45 is deleted. (Note L)

**SECTION 12: Ecological information****12.1. Toxicity**

The product is not: Ecotoxic.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
93819-94-4	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)					
	Acute fish toxicity	LC50	4,5 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 403

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
93819-94-4	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	0,9

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

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<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 2 - clearly water contaminating

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

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

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.  
H413 May cause long lasting harmful effects to aquatic life.

**Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*