

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** SONAX MoS 2 Oil**Article number:**

03395050, 03398050

UFI: 5YS3-M04T-F006-QF7W**1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use**

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC24 Lubricants, greases, release products**Application of the substance / the mixture**

Penetrating oil

Anticorrosion additive

Lubricant

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

SONAX GmbH

Münchener Straße 75

D-86633 Neuburg (Donau)

Tel.: ++49 (0)8431/53-0

Further information obtainable from:

Product safety

E-mail: erp@sonax.de

Phone: + +49 (0) 8431 53 217

1.4 Emergency telephone number: Emergency Phone Munich Tel.: +49 (0)89 19240**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Eye Irrit. 2 H319 Causes serious eye irritation.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07 GHS08

Signal word Danger**Hazard-determining components of labelling:**

C11-14 Alkane

White mineral oil, petroleum

Hazard statements

H319 Causes serious eye irritation.

H304 May be fatal if swallowed and enters airways.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear eye protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 1)

P337+P313 If eye irritation persists: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Formulation of mineral oil with additives in petroleum distillate**Dangerous components:**

CAS: 8042-47-5 EINECS: 232-455-8 Reg.nr.: 01-2119487078-27-xxxx	White mineral oil, petroleum ⚠ Asp. Tox. 1, H304	25-<50%
EC No 926-141-6 Reg.nr.: 01-2119456620-43-xxxx	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics Alternative CAS number: 64742-47-8 ⚠ Asp. Tox. 1, H304	25-<50%
CAS: 1474044-79-5 EC No 939-717-7 Reg.nr.: 01-2119980985-16-xxxx	calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate) ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	3-<5%
CAS: 110-25-8 EINECS: 203-749-3 Reg.nr.: 01-2119488991-20-xxxx	(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; ⚠ Acute Tox. 4, H332; ⚠ Skin Irrit. 2, H315; ⚠ Aquatic Chronic 3, H412	1-<3%
CAS: 128-37-0 EINECS: 204-881-4 Reg.nr.: 01-2119555270-46-xxxx	2,6-di-tert-butyl-p-cresol ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 1, H410	<1%

Regulation (EC) No 648/2004 on detergents / Labelling for contentsaliphatic hydrocarbons ≥30%**Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:**

Take affected persons out into the fresh air.

Remove soiled clothing

After inhalation:

Supply fresh air.

In the event of irritation of the respiratory tract, dizziness, nausea or unconsciousness, call medical assistance immediately.

After skin contact:

Wash the areas of skin affected with water and a mild detergent.

If symptoms persist consult doctor.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** Do not induce vomiting; call for medical help immediately.**4.2 Most important symptoms and effects, both acute and delayed**

Coughing

Breathing difficulty

Headache

Nausea

Unconsciousness

Reddening, drying and crack formation of the skin

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 2)

4.3 Indication of any immediate medical attention and special treatment needed*If swallowed or in case of vomiting, danger of entering the lungs.**Treatment in accordance with the doctor's assessment of the patient's condition. Symptomatic treatment.***SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:***Foam**Carbon dioxide**Fire-extinguishing powder**Water haze***For safety reasons unsuitable extinguishing agents:** *Water with full jet***5.2 Special hazards arising from the substance or mixture***In case of fire, the following can be released:**Carbon monoxide (CO)**Carbon dioxide (CO₂)**Nitrogen oxides (NO_x)**Phosphorus oxides (e.g. P₂O₅)***5.3 Advice for firefighters****Protective equipment:***Do not inhale explosion gases or combustion gases.**Wear fully protective suit.**Do not enter the hazardous area without a self-contained breathing apparatus.**See Section 8 for information on personal protection equipment.***Additional information***Cool endangered receptacles with water spray.**Collect contaminated fire fighting water separately. It must not enter the sewage system.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures***Ensure adequate ventilation**Wear protective equipment. Keep unprotected persons away.***6.2 Environmental precautions:***Do not allow to penetrate the ground/soil.**Do not allow to enter sewers/ surface or ground water.***6.3 Methods and material for containment and cleaning up:***Ensure adequate ventilation.**Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).**Dispose contaminated material as waste according to item 13.***6.4 Reference to other sections***See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.***SECTION 7: Handling and storage****7.1 Precautions for safe handling***Ensure good ventilation/exhaustion at the workplace.**When using product on electrical parts disconnect them from power supply first. Before re-assembly, let dry for 2 minutes.***Information about fire - and explosion protection:** *Keep ignition sources away - Do not smoke.***7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** *Provide solvent resistant, sealed floor.***Information about storage in one common storage facility:** *Store away from foodstuffs.***Further information about storage conditions:***Store receptacle in a well ventilated area.*

(Contd. on page 4)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: **SONAX MoS 2 Oil**

(Contd. of page 3)

Keep container tightly sealed.
Recommended storage temperature: 20 °C.
7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

RCP-TWA (EU)	Long-term value: 1200 mg/m ³ , 165 ppm Vapour / Total Hydrocarbons
--------------	--

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

WEL (Great Britain)	Long-term value: 10 mg/m ³
---------------------	---------------------------------------

Regulatory information WEL (Great Britain): EH40/2011

DNELs

CAS: 8042-47-5 White mineral oil, petroleum

Oral	DNEL	40 mg/kg (consumer) (long-term exposure - systemic effects)
Dermal	DNEL	92 mg/kg bw/day (consumer) (long-term exposure - systemic effects)
		220 mg/kg bw/day (worker) (long-term exposure - systemic effects)
Inhalative	DNEL	35 mg/m ³ (consumer) (long-term exposure - systemic effects)
		160 mg/m ³ (worker) (long-term exposure - systemic effects)

CAS: 1474044-79-5 calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)

Dermal	DNEL	10 mg/kg (worker) (longterm systematic effects)
Inhalative	DNEL	5 mg/m ³ (worker) (longterm systematic effects)

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

Dermal	DNEL	5 mg/kg (VL)
		8.3 mg/kg (worker)
Inhalative	DNEL	1.74 mg/m ³ (VL)
		5.8 mg/m ³ (worker)

PNECs

CAS: 1474044-79-5 calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)

Oral	PNEC	22.2 mg/kg food (human)
		10 mg/l (KS)
	PNEC	0.004 mg/l (water (fresh water))
		0.0004 mg/l (water (sea water))
69 mg/kg (sediment (fresh water))		
PNEC	6.9 mg/kg (sediment (sea water))	
	13.9 mg/kg (soil)	

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

Oral	PNEC	16.7 mg/kg food (human)
		100 mg/l (sewage plant)
	PNEC	0.004 mg/l (sporadic release)
		0.004 mg/l (freshwater (Süßwasser))
		0.0004 mg/l (sediment (sea water))
PNEC	1.29 mg/kg (sediment (fresh water))	
	1.04 mg/kg (soil)	

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Suitable technical control devices

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 4)

Personal protective equipment:**General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

If the occupational exposure limit is exceeded:

The following breathing protection is recommended:

Respiratory filter for organic gases and vapours (Type A)

Identification colour: Brown

[DIN EN 14387]

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

[EN 374]

Penetration time of glove material Value for the permeation: Level 6 (≥ 480 min)

Eye protection:

Safety glasses

[EN 166]

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	brown-opaque
Odour:	Solvent-like
Odour threshold:	Not determined.

pH-value: Not applicable.

Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	180-270 °C (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics)

Flash point: 86 °C (DIN 51758)

Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

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

Explosion limits:

Lower:	0.6 Vol % (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Upper:	7 Vol % (Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics)

Vapour pressure: Not determined.

Density at 20 °C:	0.83-0.85 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with water: Not miscible or difficult to mix.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 5)

Partition coefficient: n-octanol/water: Not determined.

Viscosity:

Flow time at 23 °C

40 - 60 s (DIN EN ISO 2431/3mm)

Kinematic at 40 °C:

7 mm²/s (DIN 51562)

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No dangerous reactions known.

10.2 Chemical stability Stable under normal conditions.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid

Keep ignition sources away - Do not smoke.

See Section 7 for information on safe handling.

10.5 Incompatible materials: strong oxidizing agents

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects There are no toxicological findings on this mixture.

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

LD/LC50 values relevant for classification:**CAS: 8042-47-5 White mineral oil, petroleum**

Oral LD50 >5,000 mg/kg (rat)

Dermal LD50 >2,000 mg/kg (rabbit)

Inhalative LC50/4d >5,000 mg/l (rat)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Oral LD50 >5,000 mg/kg (rat) (OECD 401)

Dermal LD50 >5,000 mg/kg (rabbit) (OECD 402)

Inhalative LC50/8h >5,000 mg/m³ (rat) (OECD 403)**CAS: 1474044-79-5 calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)**

Oral LD50 >2,500 mg/kg (rat)

Dermal LD50 >10,000 mg/kg (rabbit)

CAS: 110-25-8 (Z)-N-methyl-N-(1-oxo-9-octadeceny)glycine

Oral LD50 5,000 mg/kg (rat)

Inhalative LC50/4d 1.37 mg/l (rat)

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

Oral LD50 >5,000 mg/kg (rat) (OECD-Prüfrichtlinie 401)

Dermal LD50 >5,000 mg/kg (rat) (OECD-Prüfrichtlinie 402)

Primary irritant effect:**Skin corrosion/irritation**

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

Long-term exposure causes slight irritation of the skin.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Repeated dose toxicity**CAS: 1474044-79-5 calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)**

Oral NOAEL 90 d 100 mg/kg (rat) (OECD 408, 90d, target organ: liver)

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

Oral NOAEL 25 mg/kg (Ratte)

(Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 6)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

None of the ingredients are known to have effects which are carcinogenic, mutagenic or harmful to reproduction.

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

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

Reproductive toxicity 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

Viscosity: < 20,5mm²/s (40°C)

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Product is considered to be harmful to aquatic organisms. May have long-term harmful effects in aquatic environments.

Aquatic toxicity:
CAS: 8042-47-5 White mineral oil, petroleum

LC50 / 96h	>100 mg/l (fish)
EC50 / 48h	>100 mg/l (daphnia)
NOEC/NOEL	≥100 mg/l (fish) (96h)
	≥100 mg/l (algae) (72h)
	≥100 mg/l (daphnia) (48h)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

LLO 96 h	1,000 mg/l (Oncorhynchus mykiss)
ELO 48 h	1,000 mg/l (Daphnia magna)
ELO 72 h	1,000 mg/l (Pseudokirchneriella subcapitata)

CAS: 1474044-79-5 calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)

Inhalative	LC50/1	>9 mg/L (rat)
	LC50 / 96 h	>0.28 mg/l (fish)
	NOEL 21 d	2.2-10 mg/l (daphnia)
	EC50	>0.27 mg/l (daphnia)
	EC50 / 48h	>0.27 mg/l (daphnia)
	IC50 / 48h	>0.27 mg/l (daphnia)
	NOEC / 72 h	>0.27 mg/l (algae)

CAS: 110-25-8 (Z)-N-methyl-N-(1-oxo-9-octadeceny)glycine

LC50 / 96h	3.2-4.6 mg/l (fish)
EC0/ 72 h	>20 mg/l (algae)
EC20 / 0.5 h	50 mg/l (activated sludge)
EC50 / 48h	0.53 mg/l (Daphnia magna)
EC50 / 72h	5.1 mg/l (algae)

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

LC50 / 96h	>0.57 mg/l (Danio rerio)
EC50 / 48h	>0.17 mg/l (Daphnia magna)
IC50 / 72h	>0.42 mg/l (Desmodesmus subspicatus)
NOEC/NOEL	0.39 mg/l (Daphnia magna)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential
CAS: 1474044-79-5 calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)

BCF	3.16
-----	------

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 7)

log POW >6.6 log POW

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

log POW 5.1 log POW

12.4 Mobility in soil No further relevant information available.**Additional ecological information:****General notes:**

The product may not be released into the environment without control.

Do not allow product to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Waste classified as hazardous according to Annex III to Directive 2008/98/EC.

Recommendation Waste must be disposed of while observing the local, official regulations.**European waste catalogue**

- 1) Disposal / product
- 2) Disposal / contaminated packaging

20 01 13* solvents

15 01 10* packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information**14.1 UN-Number**

ADR, IMDG, IATA Void

14.2 UN proper shipping name

ADR, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class Void

14.4 Packing group

ADR, IMDG, IATA Void

14.5 Environmental hazards:**Marine pollutant:** No**14.6 Special precautions for user** Not applicable.**UN "Model Regulation":** Void**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****European Directives:**

EC/1907/2006 (REACH)

EC/1272/2008 (CLP)

EC/648/2004

National regulations:**Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2020

Version: 7.00

Revision: 14.04.2020

Trade name: SONAX MoS 2 Oil

(Contd. of page 8)

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008

Serious eye damage/eye irritation
Aspiration hazard
Hazardous to the aquatic environment - long-term (chronic) aquatic hazard

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Abbreviations and acronyms:

NOEL = No Observed Effect Level
NOEC = No Observed Effect Concentration
LC = letal Concentration
EC50 = half maximal effective concentration
log POW = Octanol / water partition coefficient
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ATE: acute toxicity estimate
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
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
IOELV = indicative occupational exposure limit values
Acute Tox. 4: Acute toxicity - inhalation – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Version history and indication of changes: Replaces version 6.01.

* Data compared to the previous version altered.