

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

Printing date 06.04.2018

Version: 7

Revision: 02.02.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** SONAX SX90 PLUS**Article number:** 04740410, 04741000, 04742000, 04743000, 04744000**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**

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

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

GHS02

Signal word Danger**Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

P271 Use only outdoors or in a well-ventilated area.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

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

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vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Formulation consisting of pressurised gas and 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 ⚠ Asp. Tox. 1, H304	25-<50%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	5-<10%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	5-<10%
CAS: 57855-77-3 EC No 939-717-7 Reg.nr.: 01-2119980985-16-xxxx	calcium bis(dinonylnaphthalenesulphonate) ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-<3%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	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 contents

aliphatic hydrocarbons	≥30%
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Additional information:

Any entry in the EC-column that begins with the number "9" is a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. See Section 15 for additional CAS number information for the substance.

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. If symptoms persist, 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

Breathing difficulty

Headache

Drowsiness

Nausea

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4.3 Indication of any immediate medical attention and special treatment needed

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**

Can form explosive gas-air mixtures.

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 self-contained respiratory protective device.

Wear fully protective suit.

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**

Keep away from ignition sources.

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.

Buildup of explosive mixtures possible without sufficient ventilation.

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.

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Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

Highly volatile, flammable constituents are released during processing.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Provide solvent resistant, sealed floor.

Observe official regulations on storing packagings with pressurised containers.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:

Store receptacle in a well ventilated area.

Protect from heat and direct sunlight.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

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
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CAS: 106-97-8 butane

WEL (Great Britain)	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

WEL (Great Britain)	Long-term value: 10 mg/m ³
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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: 57855-77-3 calcium bis(dinonylnaphthalenesulphonate)

Dermal	DNEL	0.00032 mg/kg (vls) (longterm systematic effects) 0.00032 mg/kg (worker) (longterm systematic effects)
Inhalative	DNEL	2.23 mg/m ³ (vls) (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: 57855-77-3 calcium bis(dinonylnaphthalenesulphonate)

	PNEC	1 mg/l (sewage plant) 0.0027 mg/l (PF) 0.00027 mg/l (freshwater (Süßwasser)) 0.000027 mg/l (water (sea water))
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	PNEC	0.00469 mg/kg (sediment (fresh water)) 0.469 mg/kg (sediment (sea water)) 0.936 mg/kg (soil)
CAS: 128-37-0 2,6-di-tert-butyl-p-cresol		
Oral	PNEC	16.7 mg/kg food (human)
	PNEC	100 mg/l (sewage plant) 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.

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

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

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Respiratory protection:

Not required in normal cases

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

Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

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

Eye protection: Not required in normal cases

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Aerosol
Colour:	brown-opaque
Odour:	Characteristic
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 (Active ingredient data)

Flash point: 87 °C (DIN 51758)

Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.

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Auto-ignition temperature:	Not determined.
Explosive properties:	In use, may form flammable/explosive vapour-air mixture.
Explosion limits:	
Lower:	0.6 Vol.% (Main ingredient data) 1.5 Vol.% (Propellant data)
Upper:	7.0 Vol.% (Main ingredient data) 10.9 Vol.% (Propellant data)
Vapour pressure:	Not determined.
Density at 20 °C:	0,83 - 0,85 g/cm ³ (Active ingredient data)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Flow time at 23 °C	40-50 s (DIN EN ISO 2431/3mm) (Active ingredient data)
Kinematic at 40 °C:	>7,0 - <20,5 mm ² /s (DIN 51562) (Active ingredient data)
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 Develops readily flammable gases/fumes.

10.4 Conditions to avoid

An increase in pressure may lead to bursting.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

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/m ³ (rat) (OECD 403)

CAS: 106-97-8 butane

Inhalative	LC50/4d	658 mg/l (rat)
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CAS: 57855-77-3 calcium bis(dinonylnaphthalenesulphonate)

Oral	LD50	>2,500 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg
Inhalative	LC50	>9,000 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**

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

Serious eye damage/irritation

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

Respiratory or skin sensitisation

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

Repeated dose toxicity**CAS: 128-37-0 2,6-di-tert-butyl-p-cresol**

Oral	NOAEL	25 mg/kg (Ratte)
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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 Based on available data, the classification criteria are not met.

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: 57855-77-3 calcium bis(dinonylnaphthalenesulphonate)

LC50 / 96h	>0.28 mg/l (fish)
EC50 / 48h	>0.27 mg/l (Daphnia magna)

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)

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NOEC/NOEL 0.39 mg/l (Daphnia magna)

12.2 Persistence and degradability

CAS: 8042-47-5 White mineral oil (petroleum)

Biodegradation >60 % (28d (OECD 301B))

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

Biodegradation 69 % (28d)

12.3 Bioaccumulative potential

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

Dangerous waste in accordance with the Directive on the List of Waste Materials

Recommendation Waste must be disposed of while observing the local, official regulations.

European waste catalogue

Disposal / product + Disposal / contaminated packaging

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

SECTION 14: Transport information

14.1 UN-Number ADR, IMDG, IATA

UN1950

14.2 UN proper shipping name

ADR 1950 AEROSOLS
IMDG AEROSOLS
IATA AEROSOLS, flammable

14.3 Transport hazard class(es)

ADR



Class 2 5F Gases.
Label 2.1

IMDG, IATA



Class 2.1
Label 2.1

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14.4 Packing group

ADR, IMDG, IATA Void

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user see Sections 6-8

Warning: Gases.

Transport/Additional information:**ADR**

Limited quantities (LQ) 1L

Transport category 2

Tunnel restriction code D

UN "Model Regulation": UN1950, AEROSOLS, 2.1

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

The following substance(s) in this product is (are) identified by CAS number either in countries not subject to the REACH regulation.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics: CAS 64742-47-8

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

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

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

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

NOEL = No Observed Effect Level

NOEC = No Observed Effect Concentration

LC = Lethal 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

Flam. Gas 1: Flammable gases – Category 1

Aerosol 1: Aerosols – Category 1

Press. Gas C: Gases under pressure – Compressed gas

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Skin Irrit. 2: Skin corrosion/irritation – Category 2
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
*** Data compared to the previous version altered.**

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