

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

Printing date 02.06.2015

Version: 4

Revision: 21.01.2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Trade name:** SONAX SX90 PLUS

**Article number:** 474041, 474100, 474200, 474300, 474400

#### 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

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

##### Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F+; Extremely flammable

R12: Extremely flammable.

**Information concerning particular hazards for human and environment:** Warning! Pressurised container.

#### 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.

##### 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.
- P251 Do not pierce or burn, even after use.
- P260 Do not breathe spray.
- P211 Do not spray on an open flame or other ignition source.
- 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.

#### 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 number: 926-141-6 Reg.nr.: 01-2119456620-43-XXXX	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics ⚠ Xn R65 R66 ⚠ Asp. Tox. 1, H304	25 - <50%
CAS: 106-97-8 EINECS: 203-448-7	butane ⚠ F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas C, H280	5 - <10%
CAS: 74-98-6 EINECS: 200-827-9	propane ⚠ F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas C, H280	5 - <10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane ⚠ F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas C, H280	1 - <5%
CAS: 128-37-0 EINECS: 204-881-4 Reg.nr.: 01-2119555270-46-XXXX	2,6-di-tert-butyl-p-cresol ⚠ N R50/53 ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1 - <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 risk 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:

Generally the product does not irritate the skin.

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

##### 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

No further relevant information available.

#### 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.

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**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)

Sulphur dioxide (SO<sub>2</sub>)**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.**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

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.

Fumes can combine with air to form an explosive mixture.

**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.

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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:

##### 106-97-8 butane

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

WEL (Great Britain)	Long-term value: 10 mg/m <sup>3</sup>
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##### DNELs

##### 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 <sup>3</sup> (consumer) (long-term exposure - systemic effects)
		160 mg/m <sup>3</sup> (worker) (long-term exposure - systemic effects)

##### 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 <sup>3</sup> (VL)
		5.8 mg/m <sup>3</sup> (worker)

##### PNECs

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

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

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:** Not required in normal cases

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Eye protection: Not required in normal cases

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### 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.

##### Important information on protection of health and environment, and on safety.

data of the content without propellant

pH-value: Not applicable.

##### Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	180 - 270 °C

Flash point: 88 °C (DIN 51758)

Flammability (solid, gaseous): Not applicable.

##### Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Not determined.

Danger of explosion: Not determined.  
In use, may form flammable/explosive vapour-air mixture.

##### Explosion limits:

Lower:	Explosion limits components: Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics: 0,6Vol%
Upper:	Explosion limits components: Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics: 7,0Vol%

Vapour pressure: Not determined.

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

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

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

##### Viscosity:

Flow time at 20 °C	10 - 15 s (DIN EN ISO 2431/4mm)
Dynamic:	Not determined.
Kinematic at 40 °C:	>7.0 - <20.5 mm <sup>2</sup> /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.

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

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4h	>5000 mg/l (rat)

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

Oral	LD50	>5000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/8h	>5000 mg/m <sup>3</sup> (rat) (OECD 403)

**106-97-8 butane**

Inhalative	LC50/4h	658 mg/l (rat)
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**128-37-0 2,6-di-tert-butyl-p-cresol**

Oral	LD50	>5000 mg/kg (rat) (OECD-Prüfrichtlinie 401)
Dermal	LD50	>5000 mg/kg (rat) (OECD-Prüfrichtlinie 402)

**Primary irritant effect:****on the skin:**

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

**on the eye:**

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

**Sensitisation:**

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

**Repeated dose toxicity**

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

**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.

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****8042-47-5 White mineral oil (petroleum)**

EC50 / 48h	>100 mg/l (daphnia)
LC 50 / 96 h	>100 mg/l (fish)
NOEC/NOEL	≥100 mg/l (fish) (96h)
	≥100 mg/l (algae) (72h)

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	≥100 mg/l (daphnia) (48h)
<b>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
ELO 48 h	1000 mg/l (Daphnia magna)
ELO 72 h	1000 mg/l (Pseudokirchneriella subcapitata)
LLO 96 h	1000 mg/l (Oncorhynchus mykiss)
<b>128-37-0 2,6-di-tert-butyl-p-cresol</b>	
EC50 / 48h	>0.17 mg/l (Daphnia magna)
IC50 / 72h	>0.42 mg/l (Desmodesmus subspicatus)
LC 50 / 96 h	>0.57 mg/l (Danio rerio)
NOEC/NOEL	0.07 mg/l (Daphnia magna)

### 12.2 Persistence and degradability

#### 8042-47-5 White mineral oil (petroleum)

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

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

Biodegradation 69 % (-) (28d)

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

Biodegradation 30 % (-) (MITI-Test II)

4.5 % (---) (OECD Richtlinie zur Untersuchung v. Chem.Nr 301C)

### 12.3 Bioaccumulative potential

#### 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.

#### 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

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**14.3 Transport hazard class(es)**

ADR



**Class** 2 5F Gases.  
**Label** 2.1

IMDG, IATA



**Class** 2.1  
**Label** 2.1

**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 or in regulations not yet updated with the new naming convention for hydrocarbon solvents.

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.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

R12 Extremely flammable.

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*R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

*R65 Harmful: may cause lung damage if swallowed.*

*R66 Repeated exposure may cause skin dryness or cracking.*

**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)*

*ICAO: International Civil Aviation Organisation*

*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*

*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 Harmonised 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 (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, Hazard Category 1*

*Flam. Aerosol 1: Flammable aerosols, Hazard Category 1*

*Press. Gas C: Gases under pressure: Compressed gas*

*Asp. Tox. 1: Aspiration hazard, Hazard Category 1*

*Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1*

*Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1*

**\* Data compared to the previous version altered.**

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