

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

Printing date 05.01.2016

Version: 3

Revision: 01.10.2015

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** SONAX Antifreeze & Clear View "ready to us -20°C"**Article number:** 332141, 332341, 332400, 332441, 332500, 332541, 332800**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** PC4 Anti-Freeze and de-icing products**Application of the substance / the mixture** Car care product**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. Liq. 3 H226 Flammable liquid and vapour.

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

R10: Flammable.

**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** Warning**Hazard statements**

H226 Flammable liquid and vapour.

**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.

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.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Aqueous formulation of alcohol, glycol and tensides.

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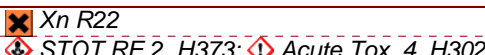
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**Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43-XXXX	ethanol	 F R11 Flam. Liq. 2, H225; Eye Irrit. 2, H319	25-50%
CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-xxxx	ethanediol	 Xn R22 STOT RE 2, H373; Acute Tox. 4, H302	< 5%

**Regulation (EC) No 648/2004 on detergents / Labelling for contents**

anionic surfactants	< 5%
perfumes	

**Additional information:** 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:** Remove soiled clothing**After inhalation:** Supply fresh air.**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:**

Rinse out mouth and then drink plenty of water.

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.

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

Water spray

Fire-extinguishing powder

Alcohol resistant foam

Carbon dioxide

**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)

**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**

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**

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

Ensure adequate ventilation

**6.2 Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

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Do not allow to penetrate the ground/soil.

### 6.3 Methods and material for containment and cleaning up:

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.

Protect against electrostatic charges.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage:**

**Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.

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

**Further information about storage conditions:**

Keep container tightly sealed.

Store receptacle in a well ventilated area.

Protect from heat and direct sunlight.

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:**

**CAS: 64-17-5 ethanol**

WEL (Great Britain) Long-term value: 1920 mg/m<sup>3</sup>, 1000 ppm

**CAS: 107-21-1 ethanediol**

WEL (Great Britain) Short-term value: 104\*\* mg/m<sup>3</sup>, 40\*\* ppm  
Long-term value: 10\* 52\*\* mg/m<sup>3</sup>, 20\*\* ppm  
Sk \*particulate \*\*vapour

IOELV (EU) Short-term value: 104 mg/m<sup>3</sup>, 40 ppm  
Long-term value: 52 mg/m<sup>3</sup>, 20 ppm  
Skin

**DNELs**

**CAS: 64-17-5 ethanol**

Oral	DNEL	87 mg/kg (consumer) (long-term exposure - systemic effects)
Dermal	DNEL	206 mg/kg bw/day (consumer) (long-term exposure - systemic effects) 343 mg/kg bw/day (worker) (lon-term exposure - systemic effects)
Inhalative	DNEL	950 mg/m <sup>3</sup> (consumer) (acute short-tem exposure - local effects) 114 mg/m <sup>3</sup> (consumer) (long-term exposure - systemic effects) 1900 mg/m <sup>3</sup> (worker) (acute short-tem exposure - local effects) 950 mg/m <sup>3</sup> (worker) (long-term exposure - systemic effects)

**CAS: 107-21-1 ethanediol**

Dermal	DNEL	53 mg/kg bw/day (consumer) (long term (chronic) / systemic) 106 mg/kg bw/day (worker) (long term (chronic) / systemic)
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Inhalative	DNEL	7 mg/m <sup>3</sup> (consumer) (long term (chronic) / local) 35 mg/m <sup>3</sup> (worker) (long term (chronic) / local)
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**PNECs****CAS: 64-17-5 ethanol**

PNEC	3.6 mg/kg (sediment (fresh water)) 2.9 mg/kg (sediment (sea water)) 0.63 mg/kg (soil) 0.96 mg/l (water (fresh water)) 0.79 mg/l (water (sea water))
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**CAS: 107-21-1 ethanediol**

PNEC	199.5 mg/l (STP) 1.53 mg/kg (gro) 20.9 mg/kg (sediment (fresh water)) 10 mg/l (water (intermittent release)) 10 mg/l (water (fresh water)) 1 mg/l (water (sea water))
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**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:** Wash hands before breaks and at the end of work.

**Respiratory protection:**

Not required in normal cases

Ensure good ventilation/exhaustion at the workplace.

**Protection of hands:** Not required in normal cases

**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:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Blue
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value:** 6.0 - 7,0

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	78 - 200 °C

**Flash point:** 28 °C (EN ISO 1523)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:**

**Decomposition temperature:** Not determined.

**Self-igniting:** Not determined.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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**Explosion limits:**

<b>Lower:</b>	Explosion limits components: ethanol: 3,5Vol%
<b>Upper:</b>	Explosion limits components: ethanol: 15Vol.%

**Vapour pressure:** Not determined.

**Density at 20 °C:** 0,96 - 0,97 g/cm<sup>3</sup>

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with water:** Fully miscible.

**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:** Not determined.

**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: 64-17-5 ethanol**

Oral	LD50	10470 mg/kg (rat) (OECD-Prüfrichtlinie 401 Literaturdaten)
Inhalative	LC50/4h	116.9 mg/l (rat) (OECD-Prüfrichtlinie 403 Literaturdaten)

**CAS: 107-21-1 ethanediol**

Oral	LD50	7712 mg/kg (rat)
Dermal	LD50	>3500 mg/kg (mouse)
Inhalative	LC50 / 6h	>2.5 mg/l (rat)

**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).

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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** There are no ecotoxicological data available on this mixture.

**Aquatic toxicity:****CAS: 64-17-5 ethanol**

EC50 / 48h	5012 mg/l (Ceriodaphnia Dubia)
ErC 50 72h	275 mg/l (Chlorella vulgaris) (OECD-Prüfrichtlinie 201)
LC 50 / 96 h	14200 mg/l (Pimephales promelas)
NOEC / 9 d	9.6 mg/l (Daphnia magna)

**CAS: 107-21-1 ethanediol**

EC20	>1995 mg/l (activated sludge)
EC50 / 48h	>100 mg/l (Daphnia magna)
EC50 / 96 h	6500 - 13000 mg/l (Pseudokirchneriella subcapitata)
LC 50 / 96 h	72860 mg/l (Pimephales promelas)

**12.2 Persistence and degradability**

The surface-active substances contained in the product meet the requirement of the EU Detergent Regulation ( EC/648/2004 ) for ultimate biodegradability for surfactants in detergents.

**CAS: 107-21-1 ethanediol**

Biodegradation	90-100 % (-) (OECD 301A)
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**12.3 Bioaccumulative potential****CAS: 107-21-1 ethanediol**

log POW	-1.36 log POW (-)
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**12.4 Mobility in soil** No further relevant information available.

**Additional ecological information:****General notes:**

Do not allow undiluted product or large quantities of it 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**

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

**European waste catalogue**

20 01 29*	detergents containing dangerous substances
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**Uncleaned packaging:**

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

**Recommendation:**

Packaging may be reused or recycled after cleaning.

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15 01 02: plastic packaging  
Recommended cleansing agents: Water

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**SECTION 14: Transport information**

**14.1 UN-Number**  
ADR, IMDG, IATA

UN1987

**14.2 UN proper shipping name**

ADR 1987 ALCOHOLS, N.O.S. (ETHANOL, ETHYL METHYL KETONE )  
IMDG, IATA ALCOHOLS, N.O.S. (ETHANOL, ETHYL METHYL KETONE)

**14.3 Transport hazard class(es)**

ADR, IMDG, IATA



Class 3 Flammable liquids.  
Label 3

**14.4 Packing group**

ADR, IMDG, IATA III

**14.5 Environmental hazards:**

Marine pollutant: No

**14.6 Special precautions for user** Warning: Flammable liquids.

**Transport/Additional information:**

ADR

Limited quantities (LQ) 5L

Transport category 3

Tunnel restriction code D/E

UN "Model Regulation": UN1987, ALCOHOLS, N.O.S. (ETHANOL, ETHYL METHYL KETONE), 3, III

**SECTION 15: Regulatory information**

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

**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**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

R11 Highly flammable.

R22 Harmful if swallowed.

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**Abbreviations and acronyms:**

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

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. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

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