

SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006

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

Formula 20

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Liquid to clean audio equipment.

1.3 Details of the supplier of the safety data sheet:

AM Denmark A/S

Skudehavnsvej 1.1. Tel.: + 45 – 49 14 22 00

DK-2150 Nordhavn Fax: +45 – 49 14 11 81

Denmark

Responsible person for the safety data sheet (e-mail): Sk@amdanmark.com**1.4 Emergency telephone number:**

NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture:**

Alttox a/s has concluded that the mixture is not to be classified according to CLP (1272/2008).

2.2 Label elements:

EUH210: Safety data sheet available on request.

2.3 Other hazards: None known.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

SECTION 3: Composition/information on ingredients**3.2 Mixtures:** Water, anti-static agent and solvent:

% w/w	Name	CAS	EC-no.	Index-no.	REACH reg.no.	Classification
1-5	Propan-2-ol	67-63-0	200-661-7	603-117-00-0	-	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336

Wording of hazard statements – see section 16.

SECTION 4: First-aid measures**4.1 Description of first aid measures:**

Inhalation: Move the affected person to fresh air. Keep at rest. In case of discomfort: Get medical attention.

Skin contact: Remove contaminated clothing. Flush and wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact: Flush with water or physiological salt water for 5 min. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. In case of discomfort: Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed:

May cause eye irritation. Prolonged or frequent contact can cause eczema and inflammation of the skin as a result of degreasing. Prolonged inhalation of vapours may result in inflammation of the nose and gastrointestinal tract and damage on liver, kidneys, blood or central nervous system.

4.3 Indication of any immediate medical attention and special treatment needed:

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Fire-fighting measures**5.1 Extinguishing media:**

Not flammable.

5.2 Special hazards arising from the substance or mixture:

Not relevant (the mixture is not combustible).

5.3 Advice for firefighters:

When extinguishing surrounding fires use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use gloves of rubber when spill is wiped up – see section 8. Ventilate area of spill.

6.2 Environmental precautions:

Do not empty into drains – see section 12.

6.3 Methods and material for containment and cleaning up:

Wipe up spillage, etc. with paper towels. Further handling of spillage - see section 13.

6.4 Reference to other sections:

See references above.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Provide sufficient ventilation. Avoid breathing vapors. Avoid contact with skin, eyes and clothing. Change contaminated clothing. Wash hands and contaminated areas with water and mild soap after use. Skin lotion may be used after work to avoid dryness of skin. The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep out of the reach of children. Keep out of direct sunlight.

7.3 Specific end use(s):

See section 1.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters:

	8-hour TWA	15-min STEL
Occupational exposure limits (EH40/2007): Propan-2-ol	400 ppm = 999 mg/m ³	500 ppm = 1250 mg/m ³
DNEL/PNEC: No CSR.		

8.2 Exposure controls:

Appropriate engineering controls: None particular.

Personal protective equipment:

Inhalation: Respiratory equipment is normally not required by sufficient ventilation or short-term use.

Skin: By prolonged contact or repeated use: Wear protective gloves of e.g. nitrile or butyl rubber (EN374).

Break-through time: App. 3 hours.

Eyes: Normally not necessary.

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Clear liquid
Odour:	None
Odour threshold:	No available data
pH:	7
Melting point / freezing point (°C):	0
Initial boiling point and boiling range (°C):	100
Decomposition temperature (°C):	No available data
Flash point (°C):	> 100
Evaporation rate:	No available data
Flammability (solid, gas):	No relevant
Upper/lower flammability or explosive limits (vol-%):	No available data
Vapour pressure (mbar, 25°C):	No available data
Vapour density (air=1):	No available data
Relative density (g/ml):	~ 1
Solubility:	Completely soluble in water
Partition coefficient: n-octanol/water, Log K _{ow} :	No available data
Auto-ignition temperature (°C):	No available data
Viscosity:	No available data
Explosive properties:	Not relevant
Oxidising properties:	Not relevant

9.2 Other information:

None

SECTION 10: Stability and reactivity

10.1 Reactivity:

No available data.

10.2 Chemical stability:

Stable under normal conditions (see section 7).

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

Formation of sparks and glows. Excessive heating and sources of ignition.

10.5 Incompatible materials:

May react with strong oxidising agents.

10.6. Hazardous decomposition products:

When heated to high temperatures (decomposition) it emits toxic fumes such as carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Hazard class	Data	Test	Reference
Acute toxicity:			
Inhalation	LC ₅₀ (rat) = 46,5 mg/L/4h (Propan-2-ol)	No info	Merck
Dermal	LD ₅₀ (rabbit) = 12800 mg/kg (Propan-2-ol)	No info	RTECS
Oral	LD ₅₀ (rat) = 4570 mg/kg (Propan-2-ol)	No info	ECHA diss.
Corrosion/irritation:	Eye irritation, rabbit (Propan-2-ol)	Draize	IUCLID
Sensitization:	No skin sensitization, guinea pig (Propan-2-ol)	Buehler	IUCLID
CMR:	Data for mutagenicity is unambiguous (Propan-2-ol)	Multiple	IUCLID

Information on likely routes of exposure: Skin, lungs and gastrointestinal tract.

Symptoms:

Inhalation: Inhalation of particles and vapours may cause irritation of the respiratory tract.

Skin: May cause irritation with redness. Degreases skin.

Eyes: May cause irritation with redness.

Ingestion: May cause irritation of the gastrointestinal tract with nausea.

Chronic effects: Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system.

SECTION 12: Ecological information

12.1. Toxicity:

Aquatic	Data	Test (Media)	Reference
Fish	LC ₅₀ (Pimephales promelas, 96h) > 1000 mg/l (Propan-2-ol)	No info (FW)	IUCLID
Crustacean	EC ₅₀ (Daphnia magna, 48h) > 1000 mg/l (Propan-2-ol)	No info (FW)	IUCLID
Algae	No applicable/available data	-	-

12.2. Persistence and degradability:

Propan-2-ol is readily biodegradable (OECD 301).

12.3. Bioaccumulative potential:

Propan-2-ol: Log K_{ow} < 1 – No significant bioaccumulation is expected.

12.4. Mobility in soil:

Propan-2-ol: K_{oc} ≤ 10 – Very large mobility expected in soil.

12.5. Results of PBT and vPvB assessment:

The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

12.6. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

The mixture is to be considered as non-hazardous waste. Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code:

20 01 30 (mixture itself) and 15 02 03 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

Not dangerous goods according to ADR/RID/IMDG/IATA.

14.1 UN-no.: None.

14.2 UN proper shipping name: None.

14.3 Transport hazard class(es): None.

14.4 Packing group: None.

14.5 Environmental hazards: No.

14.6 Special precautions for user: None.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

SECTION 15: Regulatory information

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

Must not be used by persons under 18 years of age.

Other labelling information (648/2004):

None.

15.2 Chemical Safety Assessment:

No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

ECB = European Chemicals Bureau.

ECHA = European Chemicals Agency

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA diss. = REACH Registreringsdossier from ECHA's homepage.

IUCLID = International Uniform Chemical Database Information (International kemikaliedatabase med information om kemiske stoffer)

Merck (Safety Data Sheet)

RTECS = Register of Toxic Effects of Chemical Substances (database over toksiske effekter af kemiske stoffer)

Training advice:

No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

Not relevant

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