

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:

Ultrasound Paste – Winter.

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

Paste used for ultrasound testing.

1.3. Details of the supplier of the safety data sheet:

FORCE Technology

Østre Gjesingvej 7 Phone no.: +45 43 26 70 00/ +45 76 10 06 50

DK-6715 Esbjerg

Responsible person for the safety data sheet (e-mail): info@forcetechnology.dk

1.4. Emergency telephone:

UK: + 44 844 892 0111 (24 hrs)

rs)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Flammable liquid.

CLP (1272/2008): Flam. Liq. 3;H226

Wording of R-phrases and hazard statements - see section 16.

2.2. Label elements:



WARNING

H226: Flammable liquid and vapour.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280: Wear protective gloves/eye protection/face protection.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

2.3. Other hazards: None known.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures: Aqueous solution with polymer, <1% 2-phenoxyethanol (CAS 122-99-6), <0,1% 3-(2-ethylhexyloxy)propane-1,2-diol (CAS 70445-33-9) and the following:

| % w/w | Substance name | CAS | EC-no. | Index-no. | REACH reg.no. | Classification | Note |
|-------|------------------|-----------|-----------|--------------|---------------|--------------------------------------------|------|
| ~16 | Ethanol | 64-17-5 | 200-578-6 | 603-002-00-5 | - | CLP: Flam. Liq. 2;H225 | 1 |
| <0,1 | Sodium hydroxide | 1310-73-2 | 215-185-5 | 011-002-00-6 | - | CLP: Skin Corr. 1A;H314 Eye Dam. 1;H318 | 1 |

1) The substance has an exposure limit in EH40/2005 – see section 8.

Wording of R-phrases and hazard statements – see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures:

Inhalation: Remove to fresh air. Keep at rest. In case of discomfort: Seek medical advice.

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

Eye contact: Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. Keep at rest. In case of discomfort: Seek medical advice.

Burns: Flush with water until pain ceases.

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

May cause slight irritation of skin, eyes and lungs. Prolonged or frequent contact can cause eczema and inflammation of the skin as a result of degreasing.

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:

Carbon dioxide, dry chemical, sand, foam or water fog. Do not use water jet.

5.2. Special hazards arising from the substance or mixture:

Do not inhale smoke fumes. In case of fire the product may form hazardous decomposition products such as carbon oxides.

5.3. Advice for firefighters:

Remove packages if possible or keep them cool by spraying with water. When extinguishing 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. Remove sources of ignition.

6.2. Environmental precautions:

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Sweep up and place in a suitable container for disposal. Keep away from acids. Sodium hydroxide may attack rubber, painted surfaces and certain types of plastic. Sodium hydroxide and their solutions should not be stored in galvanized containers or containers with bung of light metal, since this could lead to the formation of explosive hydrogen gas. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

6.4. Reference to other sections:

See above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Avoid breathing vapors. Provide sufficient ventilation. Avoid contact with skin, eyes and clothing. Change contaminated clothes. Wash hands and contaminated areas with water and mild soap after use. Emergency shower required.

Flammable, do not use near fire or sparks. Do not smoke.

7.2. Conditions for safe storage, including any incompatibilities:

Store in a well-closed original container and in a flammable liquid storage area. Dry, cool and separated from sources of ignition. 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:

(EH40/2005 (as of 03/2013)):

| | | 8-hour TWA | 15-min STEL |
|------------------------------|------------------|-----------------------------------|----------------------|
| Occupational exposure limits | Ethanol | 1000 ppm = 1920 mg/m ³ | - |
| | Sodium hydroxide | - | 2 mg/ m ³ |

DNEL/PNEC: No CSR.

8.2. Exposure controls:

Appropriate engineering controls: None particular.

Personal protective equipment:

Respiratory protection: In case of working in not adequate ventilated areas, use an approved mask (EN140) with a gas filter: A. The filter has a limited lifetime and must be changed. Read the instruction.

Skin protection: Wear protective gloves of e.g. nitrile or butyl rubber (EN374). There is no available data on breakthrough time for all present substances, therefore it is recommended to change the glove if spilled on. Wear full protective clothing when there is a risk of repeated or prolonged skin contact.

Eye protection: Use safety goggles (EN166) when there is a risk of eye contact.

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

| | |
|-------------------------------------------------------|----------------------------------------------------------------|
| Appearance: | Viscous liquid (paste) |
| Odour: | Alcohol |
| Odour threshold: | Not determined |
| pH: | Not determined |
| Melting point/freezing point (°C): | Not determined |
| Initial boiling point and boiling range (°C): | Not determined |
| Flash point (°C): | > 35-<60 (based on flashpoint curve for ethanol in water sol.) |
| Evaporation rate: | Not determined |
| Upper/lower flammability or explosive limits (vol-%): | Not relevant |
| Vapour pressure: | Not determined |
| Vapour density: | Not determined |
| Relative density: | Not determined |
| Solubility (in water): | Mixable |
| Partition coefficient: n-octanol/water: | Not determined |
| Auto-ignition temperature (°C): | Not determined |
| Decomposition temperature (°C): | Not determined |
| Viscosity: | Not determined |
| Explosive properties: | Not relevant |
| Oxidising properties: | Not relevant |

9.2. Other information:

None known

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:

Inflammable at temperatures above the flash point. Vapours can be set on fire by sparks or hot surfaces. Vapours may form explosive mixtures with air.

10.4. Conditions to avoid:

Sparks and extreme heat.

10.5. Incompatible materials:

Strong oxidizers and acids. Sodium hydroxide may attack rubber, painted surfaces and certain types of plastic. Sodium hydroxide and their solutions should not be stored in galvanized containers or containers with bung of light metal, since this could lead to the formation of explosive hydrogen gas.

10.6. Hazardous decomposition products:

When heated to very high temperatures (decomposition) it emits toxic gases: Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

| Hazard class | Data | Test | Reference |
|-----------------------|------------------------------------------------------------|--------------------------------------------------------------|----------------|
| Acute toxicity: | Inhalation | LC ₅₀ (rat) = 117-125 mg/l/4H (Ethanol) | OECD 403 |
| | | LC ₅₀ (rat) = 95,6 mg/l/4H (absorption) (Ethanol) | No information |
| | Dermal | LD _{Lo} (rabbit) = 20000 mg/kg (Ethanol) | No information |
| | Oral | LD ₅₀ (rat) = 1780 mg/kg (Ethanol) | No information |
| Corrosion/irritation: | No skin irritation, rabbit (Ethanol) | OECD 404 | IUCLID |
| | None to moderate eye irritation, rabbit (Ethanol) | OECD 405 | IUCLID |
| | Severe corrosive, skin and eyes, rodent (Sodium hydroxide) | No information | IUCLID |
| Sensitization: | No skin sensitisation, guinea pig (Ethanol) | GPMT etc. | IUCLID |
| CMR: | Mutagenicitet – genotoksicitet : Negative (Ethanol) | In vitro, Ames | Merck |

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

Symptoms:

Inhalation: Vapours may irritate the upper respiratory tract and cause discomfort, headache and dizziness.

Skin: May cause irritation and degrease skin.

Eyes: May cause irritation with redness and pain.

Ingestion: May irritate the mucous membranes in mouth, throat and stomach.

Chronic effects: Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system. Frequent and prolonged use of sodium hydroxide may cause sensibilisation and eczema with dry skin.

SECTION 12: Ecological information**12.1. Toxicity:**

| Aquatic | Data | Test (Media) | Reference |
|------------|----------------------------------------------------------------------------|--------------|------------|
| Fish | LC ₅₀ (Pimephales promelas, 96h) = 15300 mg/l (Ethanol) | No info (FW) | IUCLID |
| | LC ₅₀ (Oncorhynchus mykiss, 96h) = 45,5 mg/l (Sodium hydroxide) | Static (FW) | IUCLID |
| Crustacean | EC ₅₀ (Daphnia magna, 48h) = 9268 - 14221 mg/l (Ethanol) | No info (FW) | IUCLID |
| | EC ₅₀ (Ceriodaphnia dubia, 48h) = 40 mg/l (Sodium hydroxide) | No info (FW) | EPA Ecotox |
| Algae | No available data | - | - |

12.2. Persistence and degradability:

Ethanol are readily biodegradable (OECD 301B).

Sodium hydroxide is dissociated in water.

12.3. Bioaccumulative potential:

Ethanol: Log K_{ow} < 1 – No significant bioaccumulation is expected.

Sodium hydroxide: Log K_{ow} < 0 – No significant bioaccumulation is expected.

12.4. Mobility in soil:

Ethanol: Log K_{oc} ≤ 1 – high mobility in soil is expected.

Sodium hydroxide is soluble in water and will, when dissolved in water, be broken down into sodium- and hydroxide-ions, which is expected to have high mobility 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:**

Disposal should be according to local, state or national legislation. Dispose through authority facilities or pass to a chemical disposal company.

EWC-Code:

16 05 06 (Product itself)

15 02 02 (Paper, inert material, etc. contaminated with the product)

SECTION 14: Transport information

14.1. UN-no.: 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID N.O.S. (Ethanol solution)

14.3. Transport hazard class(es): 3

14.4. Packing group: III

14.5. Environmental hazards: No.

14.6. Special precautions for user: Yes. Tunnelrestriction code: D/E (ADR/RID)

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:**

The mixture must not be used by persons under 18 years of age.

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).

15.2. Chemical Safety Assessment:

No CSR.

SECTION 16: Other information**R-phrases and hazard statement mentioned in section 2 and 3:**

H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

SECTION 16: Other information (continued)

Abbreviations:

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

RID = Regulations Concerning the International Transport of Dangerous Goods by Rail

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

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 Registration dossier from ECHA webpage.

EPA Ecotox = US Environmental Protection Agency

IUCLID = International Uniform Chemical Database Information

Merck (SDS)

Training advice:

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

Other information:

SDS made from information made available to Alttox on October 2015.

Changes since the previous edition:

Not relevant.

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