

# FOSS MATERIAL SAFETY DATA SHEET

Product name: FTIR Equalizer Page: 1/6  
 Revision Date: 2004-11-25 Print date: 2004-11-25  
 P/N-no.: 499806. Included in 537811 SDS-ID: US/6.0

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product name: FTIR Equalizer  
Application: Reference solution for control and calibration of spectrophotometric analyzers. Container size: Glass bottle, 6 x 100 ml  
Supplier: FOSS Analytical A/S  
 69, Slangerupgade  
 DK-3400 Hilleroed  
 Comp.Reg.No. 73399815  
 Tel.: +45 7010 3370  
 Fax: +45 7010 3371  
 E-mail: info@foss.dk

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains: water and solvents.

The following substances shall be indicated according to legislation:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
1-5	71-23-8	200-746-9	Propan-1-ol	F;R11 Xi;R41 R67	
<0.5	1303-96-4	-	Disodium tetraborate, decahydrate	Repr. Cat. 3;R62-63	
<0.1	26628-22-8	247-852-1	Sodium azide	T+;R28 R32 N;R50-53	

## 3. HAZARDS IDENTIFICATION

The product has not been classified according to the legislation in force.

Human health: Contains a substance/a group of substances with possible risk of impaired fertility. Contains a substance/a group of substances with possible risk of harm to the unborn child.

Environment: Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small.

## 4. FIRST-AID MEASURES

Inhalation: Move into fresh air and keep at rest.

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with these instructions.

Customer No: 20198  
 Filing No: 48132

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**5. FIRE-FIGHTING MEASURES**

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Specific hazards: No specific precautions.

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions: Avoid any exposure. For personal protection, see section 8.

Environmental precautions: Avoid discharge into drains.

Methods for cleaning up: Absorb spillage with suitable absorbent material. Flush contaminated area with plenty of water. For waste disposal, see section 13.

**7. HANDLING AND STORAGE**

Safe handling advice: Observe good industrial hygiene practices. Avoid any exposure.

Technical measures: Keep the workplace clean.

Technical precautions: Not relevant.

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container. Cool down to 5-8°C before use.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

<u>Chemical name:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
n-Propyl alcohol	200 ppm 500 mg/m <sup>3</sup>	TWA	-	OSHA
n-Propanol	200 ppm	TWA	A3	ACGIH
	400 ppm	STEL	15min	
Borates, tetra, sodium salts-decahydrate	5 mg/m <sup>3</sup>	TWA	-	ACGIH
Sodium azide, as Sodium azide	0.29 mg/m <sup>3</sup>	CLV	A4	ACGIH
Sodium azide, as Hydrazoic acid vapor	0.11 ppm	CLV	A4	ACGIH

Personal protection: Wear protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Hygiene measures: Wash hands after contact.

Environmental Exposure Controls: No information available. Not available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: clear liquid  
 Odor: mild  
 pH: not available  
 Boiling point: not available  
 Flash point: >55°C  
 Explosive properties: not available  
 Relative density: 1.0  
 Solubility: Miscible with water.

**10. STABILITY AND REACTIVITY**

Stability: Stable.

Conditions/materials to avoid: Avoid frost.

Hazardous decomposition products: None specific due to the large content of water.

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**11. TOXICOLOGICAL INFORMATION**

Contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in hazardous vapor concentrations.

**Inhalation:** In high concentrations, vapors may irritate throat and respiratory system and cause coughing.  
LC50 (inhalation, mouse): 48 g/m<sup>3</sup> for 1-propanol.  
LC50 (inhalation, rat): 37 mg/m<sup>3</sup> ( Sodium azide )

**Skin contact:** Prolonged contact may cause redness and irritation. The product contains a component which may penetrate the skin.

**Eye contact:** Splashes may irritate.

**Ingestion:** No harmful effects expected in amounts likely to be ingested by accident. However, ingestion may cause nausea, headache, dizziness and intoxication.  
LD50 (oral, rat): 1870 mg/kg for 1-propanol.  
LD50 (oral, rat): 27 mg/kg for sodium azide.

**Specific effects:** Propan-1-ol: Frequent inhalation of even small concentrations may cause irritability, fatigue and memory failure.  
Contains a substance/a group of substances with possible risk of impaired fertility. Contains a substance/a group of substances with possible risk of harm to the unborn child.  
This product contains no ingredient listed on the NTP, OSHA or IARC carcinogen lists.

**12. ECOLOGICAL INFORMATION**

**Mobility:** The product is miscible with water. May spread in water systems.

**Degradability:** The degradability of the product has not been stated.

**Ecotoxicity:** The environmental hazard of the product is considered to be limited.

**Bioaccumulative potential:** No data available on bioaccumulation.

**Other adverse effects:** None known.

**13. DISPOSAL CONSIDERATIONS**

Dispose of waste and residues in accordance with local authority requirements.

**Waste from residues:** EWC-code: 16 05 09

**Empty packaging:** EWC-code: 15 01 07

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**14. TRANSPORT INFORMATION**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**15. REGULATORY INFORMATION**

Labelling: Based on information from the manufacturer regarding the chemical composition of the product, an assessment by the Danish Toxicology Centre has shown that according to EEC Directives 67/548/EEC and 1999/45/EC, the product is not liable to classification and labelling.

NFPA Rating: Health:1 Fire:1 Reactivity:0 Other:-

Specific provisions: National specific regulation may apply.

National regulation: Europe/USA:  
This Safety Data Sheet has been prepared according to the EU-regulation.

The following lists and legislation have been checked:

Directives 67/548/EEC on dangerous substances (up to and inclusive of the 28th adaptation) and 1999/45/EC on dangerous preparations.

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Threshold Limit Values (2004), ACGIH, by the American Conference on Governmental Industrial Hygienists.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants.

U.S. Department of health and human services: 2002 - Report on Carcinogens - 10th Ed.  
International Agency for Research on Cancer (IARC): IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon: IARC, World Health Organization, 1972-2004.

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**16. OTHER INFORMATION**

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 8, 15.

**Wording of Risk Phrases:**

R11	Highly flammable.
R41	Risk of serious damage to eyes.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.
R67	Vapours may cause drowsiness and dizziness.
R28	Very toxic if swallowed.
R32	Contact with acids liberates very toxic gas.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

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