

WTW Safety Data Sheet
According to EC Directives 91/155/EEC

1. Identification of the substance/preparation and of the company/undertaking

Product name:

Solution for Sample Preparation for Fluoride Determination

Ord. No.: 140 100

Model: TISAB

Manufacturer:

WTW Wissenschaftlich-Technische Werkstätten GmbH, Dr.-Karl-Slevogt-Straße 1, D-82362 Weilheim, Germany, Tel.: +49(0)881 183-0, Fax.: +49(0)881 183-420

Emergency telephone:
(001)-703-527-3887

2. Composition/information on ingredients

Chemical characterization: Aqueous saline solution

Hazardous ingredients: Ammonium chloride

Hazard symbols: Harmful (Xn)

R-phrases: 22-36

Content: 2,5 %

CAS-No.: 12125-02-9

EINECS-No.: 235-186-4

3. Hazards identification

No hazardous product.

4. First aid measures

After inhalation: Fresh air

After skin contact: Wash off with plenty of water.
Remove contaminated clothing.

After eye contact: Rinse out with plenty of water with the eyelid held wide open.

After ingestion: Make injured person drink plenty of water.
Induce vomiting. Summon doctor.

WTW Safety Data Sheet

Identification of the substance/preparation

Solution for Sample Preparation for Fluoride Determination

5. Fire-fighting measures

<i>Suitable extinguishing media:</i>	To suit environment.
<i>Unsuitable extinguishing media:</i>	No information available.
<i>Special risks:</i>	Development of hazardous vapours possible in the event of fire. The following may develop in the event of fire: NH ₃ , HCl, chlorine. Use chemical protection clothing and selfcontained breathing apparatus in the dangerous zone.
<i>Other information:</i>	Non combustible

6. Accidental release measures

<i>Personal-related precautionary measures:</i>	Avoid generation of aerosols.
<i>Environmental-protection measures:</i>	Do not allow to enter sewerage system.
<i>Procedures for cleaning/absorption:</i>	Take up with liquid-absorbent material. Forward for disposal. Clean up affected area with water.

7. Handling and storage

<i>Handling:</i>	No further requirements
<i>Storage:</i>	Tightly closed.

8. Exposure control/personal protection

<i>Specific control parameters:</i>	None
Personal protective equipment	
<i>Respiratory protection:</i>	Only required when aerosols are generated.
<i>Eye protection:</i>	Protective glasses
<i>Hand protection:</i>	Gloves (nitrile rubber)
<i>Industrial hygiene:</i>	Wash hands and face after working with solution.

WTW Safety Data Sheet

Identification of the substance/preparation

Solution for Sample Preparation for Fluoride Determination

9. Physical and chemical properties

<i>Form:</i> Liquid	<i>Colour:</i> Brown	<i>Odour:</i> Pungent
<i>pH-value</i>	near 5,1 at 20°C	
<i>Melting temperature:</i>	°C	
<i>Boiling temperature:</i>	near 100°C	
<i>Ignition temperature:</i>	°C	
<i>Flash point:</i>	°C	
<i>Explosion limite lower:</i>	/	
<i> upper:</i>	/	
<i>Density:</i>	/	
<i>Solubility in water:</i>	miscible	
<i>Thermal decomposition:</i>	/	

10. Stability and reactivity

<i>Conditions to be avoided:</i>	Do not alkalize the solution.
<i>Substances to be avoided:</i>	Alkali hydroxides, chlorates, nitrates, nitrides.
<i>Hazardous decomposition products:</i>	Ammonia, hydrochloric acid.
<i>Further information:</i>	None

11. Toxicological information

<i>Acute toxicity:</i>	LD 50 oral: 1440 mg/kg (Ammonium chloride)
<i>Further toxicological information:</i>	After skin contact: slight irritation symptoms. After eye contact: irritant effect. After ingestion: mucosal irritations. After ingestion of large amounts: headache, nausea, unconsciousness.

12. Ecological information

<i>Ecotoxic effects:</i>	Ammonium ions cause biological effects: fish: toxic as from 0,3 mg/l. No ecological problems are to be expected when the product is handled and used with due care and attention.
--------------------------	--

WTW Safety Data Sheet

Identification of the substance/preparation

Solution for Sample Preparation for Fluoride Determination

13. Disposal considerations

Products: There are no uniform regulations for the disposal of chemicals or residues. The disposal is regulated through corresponding regional laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

Packaging: Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, noncontaminated packaging may be treated like household waste or recycled.

14. Transport information

Not subject to transport regulations.

15. Regulatory information

Labelling according to EC directives

Symbol: No hazardous product

R-phrases: /

S-phrases: /

German regulations

Water pollution class; WGK: 1 Slightly polluting substance

Storage class VCI: 12

Regulation on combustible liquids; VbF: Non combustible

Other regulations: None

16. Other information

Date of issue: 15.07.2006

Supersedes edition of 12.02.2004

Reason for alteration: General update

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.