

## II Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/01/2014 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Fluoride Standard, 0.5 ppm, Premixed with TISAB II  
 Product code : LC14610

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

Use of the substance/mixture : For laboratory and manufacturing use only.

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

LabChem Inc  
 Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court  
 Zelienople, PA 16063 - USA  
 T 412-826-5230 - F 724-473-0647  
[info@labchem.com](mailto:info@labchem.com) - [www.labchem.com](http://www.labchem.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. Label elements

##### GHS-US labelling

No labelling applicable

#### 2.3. Other hazards

Other hazards not contributing to the classification : None.

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

| Name             | Product identifier   | %       | GHS-US classification  |
|------------------|----------------------|---------|--|
| Water            | (CAS No) 7732-18-5   | 91.8495 | Not classified   |
| Sodium Chloride  | (CAS No) 7647-14-5   | 2.9     | Not classified   |
| Acetic Acid      | (CAS No) 64-19-7     | 2.85    | Flam. Liq. 3, H226<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318                                    |
| Sodium Hydroxide | (CAS No) 1310-73-2   | 2.2     | Acute Tox. 4 (Dermal), H312<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 3, H402  |
| CDTA             | (CAS No) 125572-95-4 | 0.2     | Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>STOT SE 3, H335                                    |
| Sodium Fluoride  | (CAS No) 7681-49-4   | 0.0005  | Acute Tox. 3 (Oral), H301<br>Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Aquatic Acute 3, H402 |

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

#### 4.3. Indication of any immediate medical attention and special treatment needed

None.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Explosion hazard : Not applicable.
- Reactivity : None.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : None.

##### 6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Gloves.
- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.  
Incompatible products : Strong oxidizers.  
Incompatible materials : Sources of ignition. Direct sunlight.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Acetic Acid (64-19-7) |                                     |                      |
|-----------------------|-------------------------------------|----------------------|
| USA ACGIH             | ACGIH TWA (ppm)                     | 10 ppm               |
| USA ACGIH             | ACGIH STEL (ppm)                    | 10 ppm               |
| USA OSHA              | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 25 mg/m <sup>3</sup> |
| USA OSHA              | OSHA PEL (TWA) (ppm)                | 10 ppm               |

| Sodium Hydroxide (1310-73-2) |                                     |                     |
|------------------------------|-------------------------------------|---------------------|
| USA ACGIH                    | ACGIH Ceiling (mg/m <sup>3</sup> )  | 2 mg/m <sup>3</sup> |
| USA OSHA                     | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 2 mg/m <sup>3</sup> |

| Sodium Fluoride (7681-49-4) |                                |                       |
|-----------------------------|--------------------------------|-----------------------|
| USA ACGIH                   | ACGIH TWA (mg/m <sup>3</sup> ) | 2.5 mg/m <sup>3</sup> |

### 8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.  
Personal protective equipment : Avoid all unnecessary exposure.  
Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Respiratory protection : Wear appropriate mask.  
Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Appearance : Clear, colorless liquid.  
Colour : Colourless  
Odour : None.  
Odour threshold : No data available  
pH : 5.3 - 5.5  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : No data available  
Relative vapour density at 20 °C : No data available  
Relative density : No data available  
Solubility : Soluble in water.  
Water: Solubility in water of component(s) of the mixture :  
• Acetic Acid: Complete • Sodium Hydroxide: 42 g/100ml • Sodium Fluoride: 4 g/100ml

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|                      |                     |
|----------------------|---------------------|
| Log Pow              | : No data available |
| Log Kow              | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic   | : No data available |
| Explosive properties | : Not applicable.   |
| Oxidising properties | : None.             |
| Explosive limits     | : No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| Sodium Hydroxide (1310-73-2) |                                 |
|------------------------------|---------------------------------|
| LD50 dermal rabbit           | 1350 mg/kg (Rabbit; Literature) |
| ATE US (dermal)              | 1350 mg/kg bodyweight           |

| Sodium Chloride (7647-14-5) |                        |
|-----------------------------|------------------------|
| LD50 oral rat               | 3000 mg/kg             |
| LD50 dermal rat             | 10000 mg/kg            |
| ATE US (oral)               | 3000 mg/kg bodyweight  |
| ATE US (dermal)             | 10000 mg/kg bodyweight |
| ATE US (dust,mist)          | 10500 mg/l/4h          |

| Water (7732-18-5) |                        |
|-------------------|------------------------|
| LD50 oral rat     | ≥ 90000 mg/kg          |
| ATE US (oral)     | 90000 mg/kg bodyweight |

| Sodium Fluoride (7681-49-4) |                     |
|-----------------------------|---------------------|
| LD50 oral rat               | 52 mg/kg (Rat)      |
| ATE US (oral)               | 52 mg/kg bodyweight |

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Skin corrosion/irritation         | : Not classified<br>pH: 5.3 - 5.5 |
| Serious eye damage/irritation     | : Not classified<br>pH: 5.3 - 5.5 |
| Respiratory or skin sensitisation | : Not classified                  |
| Germ cell mutagenicity            | : Not classified                  |
| Carcinogenicity                   | : Not classified                  |

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| <b>Sodium Fluoride (7681-49-4)</b>                  |   |
|---|---|
| IARC group  | 3 - Not classifiable  |
| Reproductive toxicity                               | : Not classified  |
| Specific target organ toxicity (single exposure)    | : Not classified  |
| Specific target organ toxicity (repeated exposure)  | : Not classified  |
| Aspiration hazard                                   | : Not classified  |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |
| Symptoms/injuries after eye contact                 | : Causes serious eye irritation.                                    |

## SECTION 12: Ecological information

### 12.1. Toxicity

| <b>Acetic Acid (64-19-7)</b>   |   |
|--------------------------------|---|
| LC50 fishes 1                  | 75 mg/l (96 h; <i>Lepomis macrochirus</i> )                     |
| EC50 Daphnia 1                 | 47 mg/l (24 h; <i>Daphnia magna</i> ; Not neutralized)          |
| EC50 other aquatic organisms 1 | > 5000 mg/l (5 h; Activated sludge)                             |
| LC50 fish 2                    | 94 mg/l (96 h; <i>Oryzias latipes</i> )                         |
| EC50 Daphnia 2                 | 95 mg/l (24 h; <i>Daphnia magna</i> ; Static system)            |
| TLM fish 1                     | 100 ppm (96 h; <i>Carassius auratus</i> )                       |
| Threshold limit algae 1        | 90 mg/l (192 h; <i>Microcystis aeruginosa</i> ; Neutralized)    |
| Threshold limit algae 2        | 4000 mg/l (192 h; <i>Scenedesmus quadricauda</i> ; Neutralized) |

| <b>Sodium Hydroxide (1310-73-2)</b> |   |
|-------------------------------------|---|
| LC50 fishes 1                       | 45.4 mg/l (96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> ); Solution >=50%) |
| EC50 Daphnia 1                      | 40.4 mg/l (48 h; <i>Ceriodaphnia</i> sp.; Nominal concentration)                        |
| LC50 fish 2                         | 189 mg/l (48 h; <i>Leuciscus idus</i> )   |
| TLM fish 1                          | 99 mg/l (48 h; <i>Lepomis macrochirus</i> )   |
| TLM fish 2                          | 125 ppm (96 h; <i>Gambusia affinis</i> )  |

| <b>Sodium Chloride (7647-14-5)</b> |           |
|------------------------------------|-----------|
| LC50 fishes 1                      | 7650 mg/l |
| EC50 Daphnia 1                     | 1000 mg/l |

| <b>Sodium Fluoride (7681-49-4)</b> |  |
|------------------------------------|--|
| LC50 fishes 1                      | > 530 mg/l (96 h; <i>Lepomis macrochirus</i> ; Lethal)     |
| EC50 Daphnia 1                     | 98 mg/l (48 h; <i>Daphnia magna</i> )                      |
| LC50 fish 2                        | 74 mg/l (96 h; Pisces)                                     |
| EC50 Daphnia 2                     | 338 mg/l (48 h; <i>Daphnia magna</i> )                     |
| TLM fish 1                         | 419 ppm (96 h; <i>Gambusia affinis</i> )                   |
| Threshold limit algae 1            | 249 mg/l ( <i>Scenedesmus quadricauda</i> ; Toxicity test) |

### 12.2. Persistence and degradability

| <b>Fluoride Standard, 0.5 ppm, Premixed with TISAB II</b> |                  |
|---|------------------|
| Persistence and degradability                             | Not established. |

| <b>Acetic Acid (64-19-7)</b>    |  |
|---------------------------------|--|
| Persistence and degradability   | Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil. |
| Biochemical oxygen demand (BOD) | 0.6 - 0.74 g O <sub>2</sub> /g substance   |
| Chemical oxygen demand (COD)    | 1.03 g O <sub>2</sub> /g substance   |
| ThOD                            | 1.07 g O <sub>2</sub> /g substance   |
| BOD (% of ThOD)                 | 0.56 - 0.69 % ThOD   |

| <b>Sodium Hydroxide (1310-73-2)</b> |   |
|-------------------------------------|---|
| Persistence and degradability       | Biodegradability: not applicable. No (test)data on mobility of the substance available. |
| Biochemical oxygen demand (BOD)     | Not applicable  |
| Chemical oxygen demand (COD)        | Not applicable  |

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| <b>Sodium Hydroxide (1310-73-2)</b> |                                   |
|-------------------------------------|-----------------------------------|
| ThOD                                | Not applicable                    |
| BOD (% of ThOD)                     | Not applicable                    |
| <b>Sodium Chloride (7647-14-5)</b>  |                                   |
| Persistence and degradability       | Not established.                  |
| <b>Water (7732-18-5)</b>            |                                   |
| Persistence and degradability       | Not established.                  |
| <b>Sodium Fluoride (7681-49-4)</b>  |                                   |
| Persistence and degradability       | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD)     | Not applicable                    |
| Chemical oxygen demand (COD)        | Not applicable                    |
| ThOD                                | Not applicable                    |
| BOD (% of ThOD)                     | Not applicable                    |

### 12.3. Bioaccumulative potential

| <b>Fluoride Standard, 0.5 ppm, Premixed with TISAB II</b> |   |
|---|---|
| Bioaccumulative potential                                 | Not established.  |
| <b>Acetic Acid (64-19-7)</b>                              |   |
| Log Pow   | -0.31 (Experimental value)                                |
| Bioaccumulative potential                                 | Bioaccumulation: not applicable.                          |
| <b>Sodium Hydroxide (1310-73-2)</b>                       |   |
| Bioaccumulative potential                                 | Bioaccumulation: not applicable.                          |
| <b>Sodium Chloride (7647-14-5)</b>                        |   |
| Bioaccumulative potential                                 | Not established.  |
| <b>Water (7732-18-5)</b>                                  |   |
| Bioaccumulative potential                                 | Not established.  |
| <b>Sodium Fluoride (7681-49-4)</b>                        |   |
| BCF fish 1  | 2.3 <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> ) |
| Bioaccumulative potential                                 | Not bioaccumulative.                                      |

### 12.4. Mobility in soil

| <b>Acetic Acid (64-19-7)</b>       |                   |
|------------------------------------|-------------------|
| Surface tension                    | 0.028 N/m (20 °C) |
| <b>Sodium Fluoride (7681-49-4)</b> |                   |
| Ecology - soil                     | Toxic to flora.   |

### 12.5. Other adverse effects

|                              |  |
|------------------------------|--|
| Effect on ozone layer        | : No additional information available                |
| Effect on the global warming | : No known ecological damage caused by this product. |
| Other information            | : Avoid release to the environment.                  |

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                |   |
|--------------------------------|---|
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials      | : Avoid release to the environment.                                       |

## SECTION 14: Transport information

In accordance with DOT  
Not regulated for transport

### Additional information

|                   |   |
|-------------------|---|
| Other information | : No supplementary information available. |
|-------------------|---|

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### ADR

Transport document description :

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

| <b>Acetic Acid (64-19-7)</b>  |                                 |
|---|---------------------------------|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory<br>Not listed on the United States SARA Section 313 |                                 |
| RQ (Reportable quantity, section 304 of EPA's List of Lists) :  | 5000 lb                         |
| <b>Sodium Hydroxide (1310-73-2)</b>   |                                 |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory   |                                 |
| RQ (Reportable quantity, section 304 of EPA's List of Lists) :  | 1000 lb                         |
| SARA Section 311/312 Hazard Classes   | Immediate (acute) health hazard |
| <b>Sodium Fluoride (7681-49-4)</b>  |                                 |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory<br>Not listed on the United States SARA Section 313 |                                 |
| RQ (Reportable quantity, section 304 of EPA's List of Lists) :  | 1000 lb                         |

### 15.2. International regulations

#### CANADA

| <b>Fluoride Standard, 0.5 ppm, Premixed with TISAB II</b> |  |
|---|--|
| WHMIS Classification                                      | Uncontrolled product according to WHMIS classification criteria  |
| <b>Acetic Acid (64-19-7)</b>                              |  |
| Listed on the Canadian DSL (Domestic Substances List)     |  |
| WHMIS Classification                                      | Class B Division 3 - Combustible Liquid<br>Class E - Corrosive Material  |
| <b>Sodium Hydroxide (1310-73-2)</b>                       |  |
| Listed on the Canadian DSL (Domestic Substances List)     |  |
| WHMIS Classification                                      | Class E - Corrosive Material   |
| <b>Sodium Chloride (7647-14-5)</b>                        |  |
| Listed on the Canadian DSL (Domestic Substances List)     |  |
| WHMIS Classification                                      | Uncontrolled product according to WHMIS classification criteria  |
| <b>Water (7732-18-5)</b>                                  |  |
| Listed on the Canadian DSL (Domestic Substances List)     |  |
| WHMIS Classification                                      | Uncontrolled product according to WHMIS classification criteria  |
| <b>Sodium Fluoride (7681-49-4)</b>                        |  |
| Listed on the Canadian DSL (Domestic Substances List)     |  |
| WHMIS Classification                                      | Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects<br>Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

### EU-Regulations

No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Not classified

# Fluoride Standard, 0.5 ppm, Premixed with TISAB II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 15.2.2. National regulations

#### Acetic Acid (64-19-7)

Listed on the Canadian IDL (Ingredient Disclosure List)

#### Sodium Fluoride (7681-49-4)

Listed on the Canadian IDL (Ingredient Disclosure List)

### 15.3. US State regulations

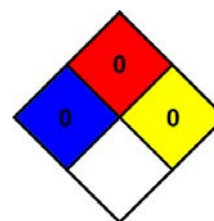
## SECTION 16: Other information

Other information :  
: None.

Full text of H-phrases: see section 16:

|                       |  |
|-----------------------|--|
| Acute Tox. 3 (Oral)   | Acute toxicity (oral), Category 3  |
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4  |
| Aquatic Acute 3       | Hazardous to the aquatic environment — Acute Hazard, Category 3                            |
| Eye Dam. 1            | Serious eye damage/eye irritation, Category 1  |
| Eye Irrit. 2A         | Serious eye damage/eye irritation, Category 2A   |
| Flam. Liq. 3          | Flammable liquids, Category 3  |
| Skin Corr. 1A         | Skin corrosion/irritation, Category 1A   |
| Skin Corr. 1B         | Skin corrosion/irritation, Category 1B   |
| Skin Irrit. 2         | Skin corrosion/irritation, Category 2  |
| STOT SE 3             | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226                  | Flammable liquid and vapour  |
| H301                  | Toxic if swallowed   |
| H312                  | Harmful in contact with skin   |
| H314                  | Causes severe skin burns and eye damage  |
| H315                  | Causes skin irritation   |
| H318                  | Causes serious eye damage  |
| H319                  | Causes serious eye irritation  |
| H335                  | May cause respiratory irritation   |
| H402                  | Harmful to aquatic life  |

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.  
NFPA fire hazard : 0 - Materials that will not burn.  
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health : 0 Minimal Hazard - No significant risk to health  
Flammability : 0 Minimal Hazard  
Physical : 0 Minimal Hazard  
Personal Protection : B

SDS US (GHS HazCom 2012)

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.