# SAFETY DATA SHEET

**Revision Date** 12-Feb-2016 **WAI1 - AGHS - OSHA** **Revision Number** 2

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

**Product Identifier**

**Product Name** 10ppm Fluoride with TISAB II Standard

**Product No** 040908

**Pure substance/mixture** Mixture

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Use as laboratory reagent

**Uses advised against** No Information available

**Manufacturer, Importer, Supplier**

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## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label Elements**

**Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** Blue **Physical State** Liquid **Odor** vinegar-like

**Precautionary Statements**
Do not handle until all safety precautions have been read and understood

**Storage**
Store in a dry place

**Hazards not otherwise classified (HNOC)**
No information available

**Other Information**
No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS-No | Weight % | Trade Secret |
|---|---|---|---|
| Water | 7732-18-5 | >90.0% | * |
| Sodium Acetate | 127-09-3 | 1 - 10% | * |
| Sodium Chloride | 7647-14-5 | 1 - 10% | * |
| trans-1,2-Diaminocyclohexane-Tetraacetic Acid Monohydrate (CDTA) | 125572-95-4 | 0.1 - 1.0% | * |
| Acetic Acid | 64-19-7 | 0.1 - 1.0% | * |
| Sodium Fluoride | 7681-49-4 | <0.1% | * |
| FD & C Blue #1 | 3844-45-9 | <0.1% | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

**First aid measures**

| | |
|---|---|
| **General Advice** | Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance. |
| **Eye Contact** | Rinse thoroughly with plenty of water, also under the eyelids. Obtain medical attention. |
| **Skin Contact** | Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. In case of skin reactions, consult a physician. |
| **Inhalation** | Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur. |
| **Ingestion** | Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Call a physician or Poison Control Center immediately. |
| **Protection of First-aiders** | Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |

**Most important symptoms and effects, both acute and delayed**

**Most important symptoms/effects** No information available

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**
No information available

**Specific Hazards Arising from the Chemical**
No information available

**Explosion Data**
**Sensitivity to Mechanical Impact** None
**Sensitivity to Static Discharge** None

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

| | |
|---|---|
| **Personal Precautions** | Use personal protective equipment. For further specification, refer to section 8 of the SDS. Evacuate personnel to safe areas. |
| **Environmental Precautions** | Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. |

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Handling**
To avoid risks to human health and the environment, comply with the instructions for use
Wear personal protective equipment
Avoid breathing dust/fume/gas/mist/vapors/spray
Ensure adequate ventilation, especially in confined areas

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage**
Keep container tightly closed in a dry and well-ventilated place
Store at room temperature in the original container
Keep away from direct sunlight

**Incompatible Products** No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** .

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Acetic Acid<br>64-19-7 | TWA: 10 ppm<br>STEL: 15 ppm | (Vacated) TWA: 10 ppm<br>(Vacated) TWA: 25 mg/m$^3$<br>TWA: 10 ppm<br>TWA: 25 mg/m$^3$ | IDLH: 50 ppm<br>TWA: 10 ppm<br>TWA: 25 mg/m$^3$<br>STEL: 15 ppm<br>STEL: 37 mg/m$^3$ |
| Sodium Fluoride<br>7681-49-4 | TWA: 2.5 mg/m$^3$ | (Vacated) TWA: 2.5 mg/m$^3$ | IDLH: 250 mg/m$^3$<br>TWA: 2.5 mg/m$^3$ |

**Appropriate engineering controls**

**Engineering Measures**
Showers
Eyewash stations
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face Protection** Safety glasses with side-shields.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** None under normal use conditions. In case of inadequate ventilation wear respiratory protection.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical State** Liquid

| | |
|---|---|
| **Appearance** | Blue |
| **Odor** | vinegar-like |
| **Odor Threshold** | No information available |
| **PH Range** | 2.3 - 5.3 |

| Property | Values | Remarks • Method |
|---|---|---|
| **Melting point/freezing point** | No information available | |
| **Boiling Point/Range** | ~ 100 °C / 212 °F | |
| **Flash Point (High in °C)** | N/A | |
| **Evaporation Rate** | No information available | |
| **Flammability (solid, gas)** | No information available | |
| **Flammability Limit in Air** | | |
| **Upper flammability limit:** | No information available | |
| **Lower flammability limit:** | No information available | |
| **Vapor pressure** | No information available | |
| **Vapor Density** | No information available | |
| **Specific Gravity** | No information available | |
| **Water Solubility** | Soluble in water | |
| **Solubility in other solvents** | No information available | |
| **Partition coefficient** | No information available | |
| **Autoignition Temperature** | | |
| **Decomposition Temperature** | No information available | |
| **Kinematic viscosity** | No information available | |
| **Dynamic viscosity** | No information available | |
| **Explosive Properties** | No information available | |
| **Oxidizing Properties** | No information available | |

**Other Information**

| | |
|---|---|
| **Softening Point** | No information available |
| **Molecular Weight** | No information available |
| **VOC Content(%)** | No information available |
| **Density** | No Information available |
| **Bulk Density** | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**
No Information available

**Chemical Stability**
Stable under normal conditions

**Possibility of Hazardous Reactions**
None under normal processing

**Conditions to Avoid**
Extremes of temperature and direct sunlight

**Incompatible Materials**
No information available

**Hazardous Decomposition Products**
Thermal decomposition can lead to release of irritating gases and vapors

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Inhalation** No information available

**Eye Contact** No information available

**Skin Contact** No information available

**Ingestion** No information available

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Water<br>7732-18-5 | LD50 > 90 mL/kg ( Rat ) | - | - |
| Sodium Acetate<br>127-09-3 | LD50 = 3530 mg/kg ( Rat ) | LD50 > 10 g/kg ( Rabbit ) | LC50 > 30 g/m$^3$ ( Rat ) 1 h |
| Sodium Chloride<br>7647-14-5 | LD50 = 3 g/kg ( Rat ) | LD50 > 10 g/kg ( Rabbit ) | LC50 > 42 g/m$^3$ ( Rat ) 1 h |
| Acetic Acid<br>64-19-7 | LD50 = 3310 mg/kg ( Rat ) | LD50 = 1060 mg/kg ( Rabbit ) | LC50 = 11.4 mg/L ( Rat ) 4 h |
| Sodium Fluoride<br>7681-49-4 | LD50 = 52 mg/kg ( Rat ) | LD50 = 175 mg/kg ( Rat ) | - |

**Information on Toxicological Effects**

**Symptoms** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenicity** No information available.

**Reproductive Effects** No information available

**STOT - single exposure** No information available

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available

**Numerical measures of toxicity - Product Information**

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Component | Freshwater Algae | Freshwater Fish | Water Flea |
|---|---|---|---|
| Sodium Acetate<br>127-09-3 | - | LC50: = 5000 mg/L, 24h static (Lepomis macrochirus) | EC50: > 1000 mg/L, 48h (Daphnia magna) |

| | | | |
|---|---|---|---|
| Sodium Chloride<br>7647-14-5 | - | LC50: 4747 - 7824 mg/L, 96h flow-through (Oncorhynchus mykiss)<br>LC50: 6420 - 6700 mg/L, 96h static (Pimephales promelas)<br>LC50: = 7050 mg/L, 96h semi-static (Pimephales promelas)<br>LC50: 6020 - 7070 mg/L, 96h static (Pimephales promelas)<br>LC50: = 12946 mg/L, 96h static (Lepomis macrochirus)<br>LC50: 5560 - 6080 mg/L, 96h flow-through (Lepomis macrochirus) | EC50: 340.7 - 469.2 mg/L, 48h Static (Daphnia magna)<br>EC50: = 1000 mg/L, 48h (Daphnia magna) |
| Acetic Acid<br>64-19-7 | - | LC50: = 75 mg/L, 96h static (Lepomis macrochirus)<br>LC50: = 79 mg/L, 96h static (Pimephales promelas) | EC50: = 47 mg/L, 24h (Daphnia magna)<br>EC50: = 65 mg/L, 48h Static (Daphnia magna) |
| Sodium Fluoride<br>7681-49-4 | EC50: = 850 mg/L, 72h static (Desmodesmus subspicatus)<br>EC50: = 272 mg/L, 96h (Pseudokirchneriella subcapitata) | LC50: = 180 mg/L, 96h semi-static (Pimephales promelas)<br>LC50: 38 - 68 mg/L, 96h static (Oncorhynchus mykiss)<br>LC50: = 830 mg/L, 96h semi-static (Lepomis macrochirus)<br>LC50: > 530 mg/L, 96h (Lepomis macrochirus) | EC50: = 338 mg/L, 48h (Daphnia magna)<br>EC50: = 98 mg/L, 48h Static (Daphnia magna) |

**Persistence and Degradability**
No information available

**Bioaccumulation/ Accumulation**
No information available

**Mobility**
.

| Component | log Pow |
|---|---|
| Acetic Acid<br>64-19-7 | -0.31 |

**Other adverse effects**
No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Improper disposal or reuse of this container may be dangerous and illegal.

| Component | CAWAST |
|---|---|
| Acetic Acid<br>64-19-7 | Toxic<br>Corrosive<br>Ignitable |
| Sodium Fluoride<br>7681-49-4 | Toxic |

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| **DOT** | Not regulated |
| **ICAO** | Not regulated |
| **IATA** | Not regulated |
| **IMDG/IMO** | Not regulated |

## 15. REGULATORY INFORMATION

**International Inventories**

| | |
|---|---|
| **USINV** | Complies |
| **CANINV** | Complies |
| **EINECS/ELINCS** | Does not Comply |
| **ENCS** | Does not Comply |
| **IECSC** | Does not Comply |
| **KECL** | Does not Comply |
| **PICCS** | Does not Comply |
| **AICS** | Does not Comply |

**USINV/ TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**CANINV/ DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
**ENCS** - Japanese Existing and New Chemical Substances
**IECSC** - Chinese Inventory of Existing Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**AICS** - Australian Inventory of Chemical Substances

### U.S. Federal Regulations

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**CWA (Clean Water Act)**

| Component | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Acetic Acid 64-19-7 | 5000 lb | - | - | X |
| Sodium Fluoride 7681-49-4 | 1000 lb | - | - | X |

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs | RQ |
|---|---|---|---|
| Acetic Acid<br>64-19-7 | 5000 lb | - | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |
| Sodium Fluoride<br>7681-49-4 | 1000 lb | - | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

**U.S. State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Component | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Water<br>7732-18-5 | - | - | X |
| Acetic Acid<br>64-19-7 | X | X | X |
| Sodium Fluoride<br>7681-49-4 | X | X | X |
| FD & C Blue #1<br>3844-45-9 | - | X | - |

**U.S. EPA Label Information**
No information available

## 16. OTHER INFORMATION

| | |
|---|---|
| **Prepared By** | Environmental, Health and Safety |
| **Prepared For** | Thermo Fisher Scientific Inc.© |
| **Issue Date** | No information available |
| **Revision Date** | 12-Feb-2016 |
| **Reason for revision** | SDS sections updated. |

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**End of Safety Data Sheet**

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