



Material Safety Data Sheet

Fluoride standards with TISAB (0.5ppm, 1ppm, 2ppm, 5ppm, 10ppm)

Section 1 - Chemical Product and Company Identification

MSDS Name:

Fluoride standards with TISAB (0.5ppm, 1ppm, 2ppm, 5ppm, 10ppm)

Catalog Numbers:

LC14610, LC14620, LC14630, LC14635, LC14640

Synonyms:

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
7647-14-5	Sodium chloride	5.8
64-19-7	Acetic acid	5.7
7681-49-4	Sodium fluoride	0.5-10ppm
1310-73-2	Sodium hydroxide	0.5
482-54-2	CDTA	0.4

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless

Caution! Corrosive. May cause eye irritation and possible burns. May cause respiratory and digestive tract irritation. May cause skin irritation.

Target Organs: none known.

Potential Health Effects

Eye:

May cause eye irritation and possible damage.



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Skin:

Itching and sensitization dermatitis can occur from contact.

Ingestion:

Ingestion can result in mouth, throat, and abdominal burning pain, vomiting, diarrhea, nausea, bloody stools, hematemesis, hematuria, albuminuria, asphyxia.

Inhalation:

May cause respiratory difficulty and coughing.

Chronic:

May cause dermatitis and conjunctivitis. Prolonged exposure to acetic acid may result in tooth discoloration, enamel erosion, jaw necrosis, nasal ulceration, laryngitis, pneumonia, bronchitis, coughing, gastrointestinal disturbances.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once. Cover burns with loose sterile non-medicated bandages.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

Ingestion:

Get medical aid at once. Give one ounce (30ml) of milk of magnesia. If victim is conscious, give 2-4 glasses of water to dilute acid.

Inhalation:

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Negligible fire and explosion hazard when exposed to heat or flame. Move container if possible, avoid breathing vapors or dust.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 7647-14-5: Not published.

CAS # 64-19-7 health-3; flammability-2; reactivity-0

CAS# 7681-49-4: Not published.

CAS# 1310-73-2: Not published.

CAS# 482-54-2: Not published.



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Explosion Limits:

Lower: Upper:

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill using an absorbent, non-combustible material such as earth, sand, diatomaceous earth, vermiculite, or other suitable absorbent. Scoop material into suitable (plastic or glass) container, label for disposal as "corrosive".

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Store in a cool, dry area. Protect from heat and incompatibles. Keep away from water reactive substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Provide local exhaust or general dilution ventilation.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sodium chloride	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Acetic acid	10 ppm TWA; 15 ppm STEL	10 ppm TWA; 25 mg/m ³ TWA	10 ppm TWA; 25 mg/m ³ TWA;
Sodium fluoride	None of the components are on this list.	as F: 2.5 mg/m ³ TWA	None of the components are on this list.
Sodium hydroxide	None of the components are on this list.	None of the components are on this list.	2 mg/m ³ TWA;
CDTA	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.

OSHA Vacated PELs

Acetic acid: 10 ppm TWA; 25 mg/m³ TWA
Acetic acid: 10 ppm TWA; 25 mg/m³ TWA
Acetic acid: 10 ppm TWA; 25 mg/m³ TWA
Acetic acid: 10 ppm TWA; 25 mg/m³ TWA

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.



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Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Not required for normal use. Firefighting-- any self-contained breathing apparatus with full facepiece operated in pressure-demand mode.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: colorless

Odor: slight pungent

pH: 5.4

Vapor Pressure: 14mm Hg @20°C

Vapor Density: > air

Evaporation Rate: < ether

Viscosity: No information found.

Boiling Point: > 212°F (> 100.00°C)

Freezing/Melting Point: < 32°F (< 0.00°C)

Decomposition Temperature: No information found.

Solubility in water: Soluble.

Specific Gravity/Density: 1.0

Molecular Formula: No information found.

Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures. May emit small amounts of acetic vapors.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials

Heat.

Hazardous Decomposition Products

Oxides of nitrogen, oxides of carbon, acetic acid vapors.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 7647-14-5: VZ4725000.

CAS# 64-19-7: AF1225000.



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CAS# 7681-49-4: WB0350000.

CAS# 1310-73-2: WB4900000.

CAS# 482-54-2: AG5000000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 7647-14-5:

Oral, mouse: LD50 = 4 gm/kg

Oral, rat: LD50 = 3 gm/kg.

CAS# 64-19-7:

Inhalation, mouse: LC50 = 5620 ppm/1H

Oral, rat: LD50 = 3310 mg/kg

Skin, rabbit: LD50 = 1060 mg/kg.

CAS# 7681-49-4:

Oral, mouse: LD50 = 57 mg/kg

Oral, rabbit: LD50 = 200 mg/kg

Oral, rat: LD50 = 52 mg/kg.

CAS# 1310-73-2:

No information found. CAS# 482-54-2:

No information found.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7647-14-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 64-19-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7681-49-4: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 482-54-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

acetic acid-- mild to severe skin, eye, mucous membrane, respiratory irritant and skin sensitizer.

Teratogenicity:

Reproductive:

Mutagenicity

Neurotoxicity

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:



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UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7647-14-5 is listed on the TSCA Inventory.

CAS# 64-19-7 is listed on the TSCA Inventory.

CAS# 7681-49-4 is listed on the TSCA Inventory.

CAS# 1310-73-2 is listed on the TSCA Inventory.

CAS# 482-54-2 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

CAS# 64-19-7: final RQ = 5000 pounds (2270 kg)

CAS# 7681-49-4: final RQ = 1000 pounds (454 kg)

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

CERCLA/SARA Section 313

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State

State Right to Know

Acetic acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Sodium fluoride can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Massachusetts.

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations

European/International Regulations

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7647-14-5 is listed on Canada's DSL List.

CAS# 64-19-7 is listed on Canada's DSL List.

CAS# 7681-49-4 is listed on Canada's DSL List.

CAS# 1310-73-2 is listed on Canada's DSL List.

CAS# 482-54-2 is listed on Canada's DSL List.

Canada Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7647-14-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 64-19-7 is listed on Canada's Ingredient Disclosure List.

CAS# 7681-49-4 is listed on Canada's Ingredient Disclosure List.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

CAS# 482-54-2 is not listed on Canada's Ingredient Disclosure List.



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Section 16 - Other Information

MSDS Creation Date: August 23, 1998

Revision Date: April 8, 2004

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