



Material Safety Data Sheet
Fehling's Solution "B"

Section 1 - Chemical Product and Company Identification

MSDS Name:

Fehling's Solution "B"

Catalog Numbers:

LC14210

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 or
(011) 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
1310-73-2	Sodium hydroxide	9
304-59-6	sodium potassium tartrate	31

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Colorless

Warning! Causes severe eye and skin irritation. May cause severe respiratory tract irritation with possible burns.

Target Organs: None known.

Potential Health Effects**Eye:**

May cause severe eye burns. May cause ulceration of the cornea with loss of vision

Skin:

May cause severe skin irritation and burns.



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Ingestion:

May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May cause alopecia (loss of hair). Latent carcinoma is thought to result from tissue destruction and scar tissue formation.

Inhalation:

Inhalation of vapor may cause severe respiratory tract irritation.

Chronic:

Prolonged inhalation may cause bronchial irritation, coughing, and bronchial pneumonia. Dermatitis, conjunctivitis with corneal damage may occur.

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.

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. Medical personnel may do esophagoscopy, irrigate injured area with 1% acetic acid to neutralize alkali. Give oxygen if respiration is depressed. Do not use gastric lavage or induce vomiting.

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, halon, or water spray.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 1310-73-2: Not published.

CAS# 304-59-6: Not published.

Explosion Limits:

Lower: Upper:



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Material may be neutralized to pH 7 with citric acid or other suitable neutralizing agent.

Section 7 - Handling and Storage

Handling:

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

Storage:

Store protected from moisture. Store capped at room temperature. Protect from heat and incompatibles. Store away from incompatible substances especially where flammable or poisonous gases may accumulate in storage.

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 hydroxide	None of the components are on this list.	None of the components are on this list.	2 mg/m ³ TWA;
Sodium potassium tartrate	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

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.

Skin:

Wear alkali resistant gloves.

Clothing:

Wear alkali resistant protective clothing.

Respirators:

Not required for normal use. 100 mg/m³: HiEPF/SAF/SCBAF.

200 mg/m³: PAPHiEF/SAF: PD, PP, CF.

Escape: DMXSF/SCBAF. Firefighting-- any self-contained breathing apparatus with full facepiece operated in pressure-demand mode.



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Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Color: Colorless
Odor: Odorless
pH: Alkaline
Vapor Pressure: 14mm Hg @20°C
Vapor Density: 0.62
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.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials

Acids, aluminum, ammonium salts, halocarbons.

Hazardous Decomposition Products

Toxic gases.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 1310-73-2: WB4900000.

CAS# 304-59-6 unlisted.

LD50/LC50:

CAS# 7732-18-5:

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

CAS# 1310-73-2:

No information found. CAS# 304-59-6:

No information found.

Carcinogenicity:

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



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

CAS# 304-59-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Sodium hydroxide-1%/24hrs eye-monkey severe irritation; 500mg/24hrs skin-rabbit severe irritation; 50ug/24hrs eye-rabbit severe irritation; 1mg/24hrs eye-rabbit severe irritation; 400ug eye-rabbit mild irritation; 100mg rinsed eye-rabbit severe irritation;

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: Sodium hydroxide solution

Hazard Class: 8

UN Number: UN1824

Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA

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

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

CAS#304-59-6 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

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



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State Right to Know

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

CAS# 304-59-6 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# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

CAS# 304-59-6 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: February 8, 1998

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