



## 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

#### 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: Noneknown.*

**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.



## Material Safety Data Sheet

### Fehling's Solution "B"

**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:



**Material Safety Data Sheet**  
**Fehling's Solution "B"**

**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**

<b>Chemical Name:</b>	<b>ACGIH</b>	<b>NIOSH</b>	<b>OSHA</b>
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 <sup>3</sup> 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/m<sup>3</sup>: HiEPF/SAF/SCBAF.

200 mg/m<sup>3</sup>: PAPHiEF/SAF: PD, PP, CF.

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



## Material Safety Data Sheet Fehling's Solution "B"

### 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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### Fehling's Solution "B"

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



## Material Safety Data Sheet

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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

Revision Date: September 20, 2007

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