

# Safety Data Sheet

## Fehling's Solution, B

### Section 1

### Product Description

**Product Name:** Fehling's Solution, B  
**Recommended Use:** Science education applications  
**Synonyms:** N/A  
**Supplier:** C2A Sales & Supplies (Barbados) Ltd.  
#3 Canewood Road, Jackson, St. Michael, Barbados BB11005  
1-246-426-1256

### Section 2

### Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;



## DANGER

Causes severe skin burns and eye damage. Causes serious eye damage.

#### GHS Classification:

Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1

<b>Acute Toxicity Oral Contains</b>	44.6 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Dermal Contains</b>	34.6 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Vapor Contains</b>	44.6 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Dust/Mist Contains</b>	44.6 % of the mixture consists of ingredient(s) of unknown toxicity

### Section 3

### Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	55.4
Potassium Sodium Tartrate, 4-hydrate	6381-59-5	34.6
Sodium Hydroxide	1310-73-2	10

### Section 4

### First Aid Measures

#### Emergency and First Aid Procedures

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position or comfortable breathing.

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### Section 5

### Firefighting Procedures

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<b>Extinguishing Media:</b>	Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
<b>Fire Fighting Methods and Protection:</b>	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
<b>Fire and/or Explosion Hazards:</b>	N/A
<b>Hazardous Combustion Products:</b>	Carbon dioxide, Carbon monoxide, Sodium Oxides

## Section 6 Spill or Leak Procedures

<b>Steps to Take in Case Material Is Released or Spilled:</b>	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Ventilate the contaminated area.
<b>Environmental Precautions:</b>	Avoid breathing material. Avoid contact with skin and eyes. Reduce airborne dust and prevent scattering by moistening with water. Ventilate the area by opening door and/or turning on fans and blowers. Avoid runoff into storm sewers and ditches that lead to waterways. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Pick up wash liquid with additional absorbent and place in a disposable container. Block any potential routes to water systems.

## Section 7 Handling and Storage

<b>Handling:</b>	Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids.
<b>Storage:</b>	Store locked up. Suitable for any general chemical storage. Keep container tightly closed in a cool, well-ventilated place.
<b>Storage Code:</b>	White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

## Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Potassium Sodium Tartrate, 4-hydrate	N/A	N/A	N/A	N/A
Sodium Hydroxide	N/A	N/A	2 mg/m3 TWA	N/A

### Control Parameters

<b>Engineering Measures:</b>	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
<b>Personal Protective Equipment (PPE):</b>	Lab coat, apron, eye wash, safety shower.
<b>Respiratory Protection:</b>	No respiratory protection required under normal conditions of use.
<b>Respirator Type(s):</b>	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
<b>Eye Protection:</b>	Wear chemical splash goggles when handling this product. Have an eye wash station available.
<b>Skin Protection:</b>	Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where use can result in skin contact, practice good personal hygiene. Use impervious gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

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**Gloves:**

Butyl rubber, Polyvinyl chloride, Nitrile, Neoprene, Natural rubber, Natural latex,, Nitrile - Extra Thick (8 mm)

## Section 9

## Physical Data

**Formula:** See Section 3

**Molecular Weight:** N/A

**Appearance:** Colorless White Liquid

**Odor:** None

**Vapor Pressure:** N/A

**Evaporation Rate (BuAc=1):** N/A

**Vapor Density (Air=1):** N/A

**Specific Gravity:** N/A

**Odor Threshold:** No data available

**pH:** >/= 14

**Melting Point:** 70 - 80 C

**Boiling Point:** 100 C

**Flash Point:** No data available

**Flammable Limits in Air:** N/A

**Solubility in Water:** Soluble

**Log Pow (calculated):** -3.88

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Percent Volatile by Volume:** N/A

## Section 10

## Reactivity Data

**Reactivity:**

No data available

**Chemical Stability:**

Stable under normal conditions.

**Conditions to Avoid:**

Elevated temperatures Exposure to moisture

**Incompatible Materials:**

Water-reactive materials, Calcium Salts, Lead salts, Strong acids, Strong oxidizing agents, Silver Nitrate, Strong reducing agents, Acids, Hydroquinone, Organic halides, Phosphorus, Alcohols, Metals, Aldehydes

**Hazardous Decomposition Products:** Sodium Oxides, Carbon dioxide, Carbon monoxide

**Hazardous**

Will not occur

**Polymerization:**

## Section 11

## Toxicity Data

**Routes of Entry** N/A

**Symptoms (Acute):** N/A

**Delayed Effects:** No data available

**Acute Toxicity:**

**Chemical Name**

**CAS Number**

**Oral LD50**

**Dermal LD50**

**Inhalation**

**LC50**

Water

7732-18-5

Oral LD50 Rat  
90000 mg/kg

Potassium Sodium Tartrate, 4-hydrate

6381-59-5

**Carcinogenicity:**

**Chemical Name**

**CAS Number**

**IARC**

**NTP**

**OSHA**

Potassium Sodium Tartrate, 4-hydrate

6381-59-5

Not listed

Not listed

Not listed

Sodium Hydroxide

1310-73-2

Not listed

Not listed

Not listed

**Chronic Effects:**

**Mutagenicity:**

No evidence of a mut

**Teratogenicity:**

No evidence of a teratogenic effect (birth defect).

**Sensitization:**

No evidence of a sensitization effect.

**Reproductive:**

No evidence of negative reproductive effects.

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## Target Organ Effects:

**Acute:** See Section 2

**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12 Ecological Data

**Overview:** Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Caustic materials (alkalies, bases) are harmful to aquatic life in low concentrations.

**Mobility:** No data

**Persistence:** Dissolved into water

**Bioaccumulation:** No data

**Degradability:** No data

**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Potassium Sodium Tartrate, 4-hydrate	6381-59-5	
Sodium Hydroxide	1310-73-2	Aquatic LC50 (96h) Rainbow Trout 45.4 MG/L

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:**

UN1760, Corrosive liquids, n.o.s.(sodium hydroxide), 8, II

**Air - IATA Proper Shipping Name:**

UN1760, Corrosive liquids, n.o.s.(sodium hydroxide), 8, II

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Potassium Sodium Tartrate, 4hydrate	6381-59-5	No	No	No	No	No
Sodium Hydroxide	1310-73-2	No	1000 lb	1000lb (454kg)	No	No RQ final RQ

**California Prop 65:**

No California Proposition 65 ingredients

## Section 16 Additional Information

**Revised:** 08/21/2018

**Replaces:** 06/15/2018

**Printed:** 08-25-2018

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

# Safety Data Sheet

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health