



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name SoBrite (80-LS-HS-LC-HC)
CAS # Mixture
Product use Aluminium Brightener
Manufacturer SODROX Chemicals Ltd.
7040 Wellington Road 124, R.R. #6
Guelph, ON N1H 6J3 CA
Business Phone: 519-837-2330
Fax: 519-837-3300
Emergency Phone: 1-800-363-6824

2. Hazards Identification

Emergency overview DANGER -- CORROSIVE
CAUSES SKIN AND EYE BURNS.
MAY BE FATAL IF SWALLOWED OR INHALED.

Potential short term health effects

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes Causes chemical burns. May cause blindness.

Skin Causes chemical burns.

Inhalation Inhalation of mist may cause respiratory tract irritation, coughing or headache.

Ingestion Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

Signs and symptoms The product causes burns of eyes, skin and mucous membranes.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Phosphoric acid	7664-38-2	60 - 100
Sulfuric acid	7664-93-9	10 - 30

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 20 minutes. Obtain medical attention immediately.

Skin contact Immediately flush with cool water for 20 minutes while removing contaminated clothing and shoes. Discard or wash well before reuse. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice Avoid contact with eyes and skin. Wear impervious gloves and chemical splash goggles. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of phosphorus. Oxides of sulphur.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for containment	Stop leak if you can do so without risk.
Methods for cleaning up	Should not be released into the environment. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

7. Handling and Storage

Handling	DANGER -- CORROSIVE Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or mists of this product. Use only with adequate ventilation. Keep container tightly closed. Wash thoroughly after handling.
Storage	Keep out of the reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits	
Ingredient(s)	Exposure Limits
Phosphoric acid	ACGIH-TLV TWA: 1 mg/m ³ STEL: 3 mg/m ³ OSHA-PEL TWA: 1 mg/m ³
Sulfuric acid	ACGIH-TLV TWA: 0.2 mg/m ³ OSHA-PEL TWA: 1 mg/m ³
Engineering controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye / face protection	Chemical splash goggles.
Hand protection	Impervious gloves. Confirm with reputable supplier first.
Skin and body protection	As required by employer code. Use of an impervious apron is recommended.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear
Color	Pale blue
Form	Syrupy Liquid
Odor	Odorless
Odor threshold	Not available
Physical state	Liquid
pH	0 - 1 (1% solution in water)
Melting point	Not available
Freezing point	< -22.00 °F (< -30 °C)
Boiling point	275.00 °F (135 °C)
Pour point	Not available
Evaporation rate	Not available
Flash point	Not available
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	5.76 MmHg @ 20°C
Vapor density	Not available
Specific gravity	1.68 - 1.73 @ 20°C (Water = 1)
Octanol/water coefficient	Not available
Solubility (H2O)	Soluble in cold water
Viscosity	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	Reacts violently with alkaline material. This product may react with reducing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong oxidizing agents. Bases. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of phosphorus. Oxides of sulphur.

11. Toxicological Information**Component analysis - LC50**

Ingredient(s)	LC50
Phosphoric acid	Not available
Sulfuric acid	1020 mg/l/4h rat; 160 mg/m3 mouse

Component analysis - Oral LD50

Ingredient(s)	LD50
Phosphoric acid	1530 mg/kg rat
Sulfuric acid	2140 mg/kg rat

Effects of acute exposure

Eye	Causes chemical burns. May cause blindness.
Skin	Causes chemical burns.
Inhalation	Inhalation of mist may cause respiratory tract irritation, coughing or headache.
Ingestion	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Sensitization Non-hazardous by WHMIS/OSHA criteria.

Chronic effects Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity There is sufficient evidence that occupational exposure to strong inorganic acid mists containing sulphuric acid is carcinogenic.

ACGIH - Threshold Limit Values - Carcinogens

Sulfuric acid 7664-93-9 A2 - Suspected Human Carcinogen (contained in strong inorganic acid mists)

IARC - Group 1 (Carcinogenic to Humans)

Sulfuric acid 7664-93-9 Monograph 54 [1992] (Occupational exposure to mists and vapours from sulfuric acid and other strong inorganic acids)

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Name of Toxicologically Synergistic Products Not available

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Phosphoric acid 7664-38-2 96 Hr LC50 *Gambusia affinis*: 3 - 3.5 mg/L
Sulfuric acid 7664-93-9 96 Hr LC50 *Brachydanio rerio*: >500 mg/L [static]

Ecotoxicity - Water Flea - Acute Toxicity Data

Phosphoric acid 7664-38-2 12 Hr EC50 *Daphnia magna*: 4.6 mg/L
Sulfuric acid 7664-93-9 24 Hr EC50 *Daphnia magna*: 29 mg/L

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Mobility in environmental media Not available

Environmental effects Harmful to aquatic life.

Aquatic toxicity Not available

Partition coefficient Not available

Chemical fate information Not available

Other adverse effects Not available

13. Disposal Considerations

Disposal instructions Review federal, state/provincial, and local government requirements prior to disposal.

Waste from residues / unused products Not available

Contaminated packaging Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.
(PHOSPHORIC ACID RQ = 7022 lbs, SULPHURIC ACID RQ = 6341 lbs)

Hazard class 8

UN number 3264

Packing group II

Additional information:

Special provisions A6, B2, IB2, T11, TP2, TP27

Packaging exceptions 154



Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.
(PHOSPHORIC ACID, SULPHURIC ACID)

Hazard class 8

UN number 3264

Packing group II

Additional information:

Special provisions 16



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

Phosphoric acid	7664-38-2	1 %
Sulfuric acid	7664-93-9	1 %

WHMIS status Controlled

WHMIS classification Class E - Corrosive Material

WHMIS labeling



Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Phosphoric acid	7664-38-2	5000 Lb final RQ; 2270 kg final RQ
Sulfuric acid	7664-93-9	1000 Lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

Sulfuric acid	7664-93-9	1000 Lb EPCRA RQ
---------------	-----------	------------------

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

Sulfuric acid	7664-93-9	1000 Lb TPQ
---------------	-----------	-------------

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Sulfuric acid	7664-93-9	1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
---------------	-----------	---

U.S. - CWA (Clean Water Act) - Hazardous Substances

Phosphoric acid	7664-38-2	Present
Sulfuric acid	7664-93-9	Present

CERCLA (Superfund) reportable quantity

Phosphoric acid: 5000.0000
 Sulphuric acid: 1000.0000
 Copper sulfate: 10.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
--------------------------	---

Section 302 extremely hazardous substance	No
--	----

Section 311 hazardous chemical	Yes
---------------------------------------	-----

Clean Air Act (CAA)	Not available
----------------------------	---------------

Clean Water Act (CWA)	Hazardous substance
------------------------------	---------------------

State regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
--------------------------	--

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Phosphoric acid	7664-38-2	Present
Sulfuric acid	7664-93-9	Present

U.S. - Illinois - Toxic Air Contaminant Carcinogens

Sulfuric acid	7664-93-9	ACGIH Carcinogen
---------------	-----------	------------------

U.S. - Illinois - Toxic Air Contaminants

Sulfuric acid	7664-93-9	Present (aerosol)
---------------	-----------	-------------------

U.S. - Louisiana - Reportable Quantity List for Pollutants

Phosphoric acid	7664-38-2	5000 Lb final RQ; 2270 kg final RQ
Sulfuric acid	7664-93-9	1000 Lb final RQ; 454 kg final RQ

U.S. - Massachusetts - Right To Know List

Phosphoric acid	7664-38-2	Present
Sulfuric acid	7664-93-9	Extraordinarily hazardous

U.S. - Minnesota - Hazardous Substance List

Phosphoric acid	7664-38-2	Present
Sulfuric acid	7664-93-9	Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Phosphoric acid	7664-38-2	sn 1516
Sulfuric acid	7664-93-9	sn 1761

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Phosphoric acid	7664-38-2	5000 Lb RQ (air); 100 lb RQ (land/water)
Sulfuric acid	7664-93-9	1000 Lb RQ (air); 100 lb RQ (land/water)

U.S. - North Carolina - Control of Toxic Air Pollutants

Sulfuric acid	7664-93-9	0.012 mg/m3 (chronic toxicants); 0.1 mg/m3 (acute systemic toxicants)
---------------	-----------	---

U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities

Sulfuric acid	7664-93-9	500 Lb TQ
---------------	-----------	-----------

U.S. - Pennsylvania - RTK (Right to Know) List

Phosphoric acid	7664-38-2	Environmental hazard
Sulfuric acid	7664-93-9	Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Phosphoric acid	7664-38-2	Toxic; Flammable
Sulfuric acid	7664-93-9	Toxic; Flammable

Inventory name**Country(s) or region**

Canada

Canada

United States & Puerto Rico

Inventory name

Domestic Substances List (DSL)

Non-Domestic Substances List (NDSL)

Toxic Substances Control Act (TSCA) Inventory

On inventory (yes/no)*

Yes

No

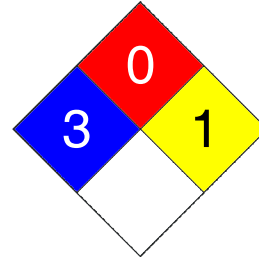
Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 3
Flammability	0
Physical Hazard	1
Personal Protection	X

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

06-Jan-2012

Effective date

15-Feb-2012

Expiry date

15-Feb-2015

Prepared by

Dell Tech Laboratories Ltd. (519) 858-5021

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / MSDS coordinator - As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution® initiative, Sodrox Chemicals Ltd. require, as a condition of sale, that you forward the attached Material Safety Data Sheet(s) to all affected employees, customers, and end-users. Sodrox Chemicals Ltd will send any available supplementary handling, health, and safety information to you at your request.