Material Safety Data Sheet
Soap Solution, APHA

Section 1 - Chemical Product and Company Identification

MSDS Name:
Soap Solution, APHA
Catalog Numbers:
LC22800
Synonyms:
Soap Solution, 1 mL = 1 mg $CaCO_3$
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	>18
8029-38-7	Castile soap*	1-2
67-56-1	Methyl alcohol	<5
67-63-0	Isopropyl alcohol	<5
64-17-5	Ethyl alcohol	65-75

*Castile soap is a vegetable-based soap whose primary constituents are Potassium Oleate (CAS# 143-18-0) and/or Potassium Cocoate (CAS# 61789-30-8).

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Clear, yellow solution*

Danger! *Flammable liquid and vapor. May be fatal or cause blindness if swallowed. Harmful if inhaled or absorbed through the skin. May cause central nervous system depression. May cause liver, heart, and kidney damage. Causes irritation to eyes, skin, and respiratory tract.*

Target Organs: *Eyes, skin, liver, kidneys, heart, central nervous system*

Potential Health Effects

Eye:
May cause eye irritation.

Skin:
May cause irritation and defatting.

Ingestion:
May cause central nervous system effects, including vertigo, anxiety, depression, muscle incoordination, emotional instability, dizziness, weakness, fatigue, headache, drowsiness, unconsciousness, coma, and death. May cause gastrointestinal irritation with nausea and vomiting.

Inhalation:
Exposure to high concentrations of vapors may cause headache, nausea, vomiting, drowsiness, dizziness, unconsciousness, coma, and death.

Chronic:
Repeated or excessive exposure may result in respiratory irritation, cough, headache, dermatitis, conjunctivitis, with possible liver and kidney damage, weight loss, neurological disorders (tremors, amnesia, myocardial and circulatory failure).

Section 4 - First Aid Measures

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid at once. Do NOT allow victim to rub or keep eyes closed.

Skin:
Get medical aid at once. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:
Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs naturally, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person. Do not leave victim unattended. Get medical aid at once.

Inhalation:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors are heavier than air and may travel considerable distance and flash back from source of ignition. Move container if possible; avoid breathing vapors or dust. Dangerous fire/negligible explosion hazard when exposed to heat or flame.

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

Autoignition Temperature:
Not applicable.

Flash Point:
68°F (20°C)

NFPA Rating:

(estimated) Health- 1, Flammability- 3, Instability- 0.

Explosion Limits:

Lower: 3.3 Upper: 19

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 labeled containers for later disposal. Keep out of sewers/drains. Use non-sparking tools, and ventilate area.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Keep away from heat, sparks, and flame. Ground equipment containing this material.

Storage:

Store in tightly closed containers in a cool, dry, well-ventilated area. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None listed	None listed	None listed
Methyl alcohol	200 ppm TWA; 250 ppm STEL	200 ppm TWA; 260 mg/m3 TWA; 6000 ppm IDLH	200 ppm TWA; 260 mg/m3 TWA
Isopropyl alcohol	200 ppm TWA; 400 ppm STEL	400 ppm TWA; 980 mg/m3 TWA; 2000 ppm IDLH	400 ppm TWA; 980 mg/m3 TWA
Ethyl alcohol	1000 ppm TWA	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm TWA; 1900 mg/m3 TWA

OSHA Vacated PELs:

Ethyl alcohol: 1000 ppm TWA; 1900 mg/m3 TWA
Methyl alcohol: 200 ppm TWA; 260 mg/m3 TWA
Isopropyl alcohol: 400 ppm TWA; 980 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Yellow
Odor:	Alcoholic
pH:	Not available
Vapor Pressure:	59 mbar @ 20°C
Vapor Density:	1.59
Evaporation Rate:	Not available
Viscosity:	1.2 mPas @ 20°C
Boiling Point:	78°C
Freezing/Melting Point:	-114°C
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	0.89
Molecular Formula:	Not applicable
Molecular Weight:	Not applicable

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible substances, heat, sparks, sources of ignition

Incompatibilities with Other Materials:
Oxidizing agents, alkali and alkaline earth metals.

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000.
CAS# 64-17-5: KQ6300000.
CAS# 67-56-1: PC1400000.
CAS# 67-63-0: NT8050000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 64-17-5:
Inhalation, rat: LC50 = 20000 ppm/10H
Oral, mouse: LD50 = 3450 mg/kg
Oral, rat: LD50 = 7060 mg/kg
CAS# 67-56-1:
Inhalation, rat: LC50 = 64000 ppm/4H
Oral, rat: LD50 = 5600 mg/kg
Skin, rabbit: LD50 = 15800 mg/kg
CAS# 67-63-0:
Inhalation, rat: LC50 = 72600 mg/m3
Oral, rat: LD50 = 5000 mg/kg
Skin, rabbit: LD50 = 12800 mg/kg

Carcinogenicity:

No components are listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Methanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Specific developmental abnormalities include cardiovascular, musculoskeletal, and urogenital systems. Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

Teratogenicity:

CAS# 64-17-5: Oral, Human - woman: TDLo = 41 gm/kg (female 41 week(s) after conception) Effects on Newborn - Apgar score (human only) and Effects on Newborn - other neonatal measures or effects and Effects on Newborn - drug dependence.

Reproductive:

CAS# 64-17-5: Intrauterine, Human - woman: TDLo = 200 mg/kg (female 5 day(s) pre-mating) Fertility - female fertility index (e.g. # females pregnant per # sperm positive females; # females pregnant per # females mated).

Mutagenicity:

CAS# 64-17-5: DNA Inhibition: Human, Lymphocyte = 220 mmol/L.; Cytogenetic Analysis: Human, Lymphocyte = 1160 gm/L.; Cytogenetic Analysis: Human, Fibroblast = 12000 ppm.; Cytogenetic Analysis: Human, Leukocyte = 1 pph/72H (Continuous).; Sister Chromatid Exchange: Human, Lymphocyte = 500 ppm/72H (Continuous).

Neurotoxicity:

No information found

Section 12 - Ecological Information

Ecotoxicity:

Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @ 24-24.3°CFish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingerling (Unspecified)Bacteria: Phytobacterium phosphoreum: EC50 = 34900 mg/L; 5-30 min; Microtox test CAS# 64-17-5: When spilled on land it is apt to volatilize, biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in ground water is unknown. When released into water it will volatilize and probably biodegrade. It would not be expected to adsorb to sediment or bioconcentrate in fish.

Environmental:

CAS# 64-17-5: When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Flammable liquid, n.o.s. (Ethanol, isopropanol, methanol)
Hazard Class: 3
UN Number: UN1993
Packing Group: PGII

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 64-17-5 is listed on the TSCA Inventory.
CAS# 67-56-1 is listed on the TSCA Inventory.
CAS# 67-63-0 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 67-56-1: 5000 lb. final RQ (2270 kg)

CERCLA/SARA Section 313:

This material contains Methyl alcohol (CAS# 67-56-1, 2.5 – 3.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This material contains Isopropyl alcohol (CAS# 67-63-0, 2.5 – 3.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State

State Right to Know:

Ethyl alcohol can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
Methyl alcohol can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
Isopropyl alcohol can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:

WARNING: This product contains Ethyl alcohol, a chemical known to the state of California to cause developmental reproductive toxicity.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 64-17-5 is listed on Canada's DSL List.
CAS# 67-56-1 is listed on Canada's DSL List.
CAS# 67-63-0 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# 64-17-5 is listed on Canada's Ingredient Disclosure List.
CAS# 67-56-1 is listed on Canada's Ingredient Disclosure List.
CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: January 31, 1999
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