

Educational Innovations, Inc.

Material Safety Data Sheet (MSDS)

SECTION 1 -- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Sodium Borate Solution

Educational Innovations, Inc. 5 Francis J. Clarke Circle, Bethel, CT 06801

SECTION 2 -- COMPOSITION, INFORMATION INGREDIENTS

Sodium Borate (1330-43-4) 4%, Water (7732-18-5) 96%
CAS #: not established

SECTION 3 -- HAZARDS IDENTIFICATION

Colorless, odorless solution.
Possible skin irritant. Avoid body tissue contact.

Health-0
Flammability-0
Reactivity-0
Exposure-1
Storage-0

0 is low hazard, 3 is high hazard

SECTION 4 -- FIRST AID MEASURES

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, induce vomiting. After vomiting, give mixture of 2 Tbs. of activated charcoal mixed with one cup of water. Call a physician or poison control at once.

SECTION 5 -- FIRE FIGHTING MEASURES

Non flammable, non combustible liquid.

NFPA CODE
None Established

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area and ventilate area. Contain spill with sand or absorbent material; deposit in sealed bag or container. See Section 8 and 13 for further information.

SECTION 7 -- HANDLING AND STORAGE

Store with borates, chromates, manganates and permanganates.

5 Francis J. Clarke Circle
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(203) 748-3224 voice
(203) 229-0740 fax
www.TeacherSource.com

Material Safety Data Sheet
 May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor
 Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072



IDENTITY (As Used on Label and List) Polyvinyl Alcohol

Note: Blank spaces are not permitted, if any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

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Emergency Telephone Number
 219/762-3165
 Telephone Number for Information
 Date Prepared
 April 13, 1992
 Signature of Preparer (Optional)

Section II - Hazardous Ingredients/Identify Information

Hazardous Components (Specific Chemical Identity; Common Name(s))

OSHA PEL ACGIH TLV Other Limits Recommended % (Optional)

None

Section III - Physical/Chemical Characteristics

Boiling Point	None	Specific Gravity (H ₂ O = 1)	1.265-1.253
Vapor Pressure (mm Hg)	None	Melting Point	140°F.
Vapor Density (Air = 1)	None	Evaporation Rate (Butyl Acetate = 1)	Solild
Solubility in Water	Solild	None	Solild

Appearance and Odor
 Solild at 140°F.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	None	Harmful Limits	LEL	UEL
Extinguishing Media	CO ₂ , Water			
Special Fire Fighting Procedures	None			
Unusual Fire and Explosion Hazards	None			

(Reproduce locally)

OSHA 174 5-91-1044

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid	N/A
	Stable		

Incompatibility (Materials to Avoid) None

Hazardous Decomposition or Byproducts

Hazardous Polymerization

May Occur	None	Conditions to Avoid	N/A
Will Not Occur	X		

Section VI - Health Hazard Data

Routes of Entry: Inhalation? Ingestion?

Health Hazards (Acute and Chronic)

Chronicity: NTP? IARC Monographs? OSHA Regulator?

Signs and Symptoms of Exposure

Medical Conditions Generally Aggravated by Exposure None

Emergency and First Aid Procedures

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

None. Material is a solild

Waste Disposal Method

Precautions to Be Taken in Handling and Storage

None other than stated on carton-end label

Other Precautions None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Local Exhaust	N/A	Special	N/A
Mechanical (General)	N/A	Other	N/A

Protective Gloves

Other Protective Clothing or Equipment	N/A	Eye Protection	N/A
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Workhygiene Practices N/A



Material Safety Data Sheet

VERSION DATE: 07/05/93

Section I PRODUCT IDENTIFICATION

MSDS NUMBER: 1154248000
PRODUCT NAME: GLO-LUX SERIES 1000
CLASS: ZINC SULFIDE MIXTURE

HMIS Hazard Codes
Health: _____
Flammability: _____
Reactivity: _____
Personal Protective Equipment: _____

Section II HAZARDOUS INGREDIENTS

INGREDIENT: ZINC SULFIDE
(Reportable under 302A, 313)
CAS# 68611-70-1
Density: NA
% Volatile by Volume: NA
Freezing Range: NA
Boiling Range: NA

Section III PHYSICAL DATA

PHYSICAL DATA:
H2O SOLUBLE: INSOLUBLE
H2O REACTIVE: NO
VAPOR DENSITY: NA
SPECIFIC GRAVITY: 4.03
APPEARANCE AND ODOR: YELLOW/GREEN CRYSTALLINE POWDER

Section IV FIRE AND EXPLOSION HAZARDS

EXTINGUISHING MEDIA:
USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING FIRE.
SPECIAL FIRE FIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS.
UNUSUAL HAZARDS:
WHEN MATERIAL IS EXPOSED TO HIGH TEMPERATURES IT MAY PRODUCE OXIDES OF SULFUR AND/OR HYDROGEN SULFIDE.

Section V REACTIVITY DATA

STABILITY: Y
STABILITY CONDITIONS TO AVOID: N/A
INCOMPATIBILITY: CONTACT WITH MINERAL ACIDS CAN PRODUCE HYDROGEN SULFIDE.
HAZARDOUS DECOMPOSITION OR HY-PRODUCTS: HYDROGEN SULFIDE, OXIDES OF SULFUR, ZINC OXIDE.
POLYMERIZATION: N
POLYMERIZATION CONDITIONS TO AVOID: N/A

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HEALTH INFORMATION

EFFECTS OF OVEREXPOSURE:
Zinc Sulfide is considered to be of LOW Toxicity. There are no reports in the literature of adverse effects attributed to Zinc Sulfide. Ingestion may cause nausea, vomiting, diarrhea and abdominal pains. Inhalation may result in lung injury. Skin contact may cause rash, redness or dermatitis.
EMERGENCY AND FIRST AID PROCEDURE:
INHALATION: (IF PULMONARY INVOLVEMENT DEVELOP) Remove from exposure immediately and obtain medical attention.
INGESTION: Large quantities of water to drink. Induce vomiting and obtain medical attention.
EYE CONTACT: Flush with water (Lift lids) for fifteen (15) minutes. If irritated, seek medical attention.
SKIN CONTACT: Wash affected areas with soap and water. If irritated, seek medical attention.
CARCINOGEN: IARC: No
NTP: No
OSHA: No

SPILL OR LEAK PROCEDURE

MATERIAL SPILLAGE: Absorb with sand and dispose of in approved manner. Dike area with sand to contain spilled liquid. Recover free product. Use water spray to dilute spill. Flush the contaminated area with water spray.
WASTE DISPOSAL: Dispose of in accordance with Local regulations. Keep product out of sewers and waterways.

EMPLOYEE PROTECTION

RESPIRATORY PROTECTION: Maintain good ventilation. NIOSH approved respirator for organic vapors in areas of poor ventilation. If airborne concentrations exceed PEL (see 1) use supplied air respirator.
VENTILATION: Provide adequate cross air circulation. To avoid breathing vapors or spray, open windows doors. Ensure fresh air entry during application and drying.
PROTECTIVE GLOVES: Wear Impermeable gloves (Neoprene) to minimize skin contact. Use nitrile rubber, Saranex gloves for maximum protection.
EYE PROTECTION: Splashproof safety goggles to protect against splash. This product contains eye irritating materials.
OTHER PROTECTIVE EQUIPMENT: Eyewash station (fountain). A source of clean water to flush eyes and skin.
HYGIENIC PRACTICES: Wash hands before eating or using washroom.

SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS
Protect from freezing
OTHER PRECAUTIONS
Check all containers for leaks.
Keep containers closed when not in use.
Do not take internally.

TRANSPORTATION AND REGULATORY DATA

TRANSPORTATION DATA: UNNA Number: (NOT REGULATED)
D.O.T. EPA RCRA
Hazard Class: NON-HAZARDOUS
Shipping Name: GLO-LUX 1000
CERCLA Reportable Qty:
OTHER REGULATORY CONTROLS
SARA Section 313 Toxic Chemicals
Chemical CAS Number Weight % Fire Release React Acute Chron
ETHYLENE GLYCOL BUTYL 111-76-2 3.53 X X
ZINC OXIDE 1314-13-2 1.19 X X

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