

SPI Supplies Division

Structure Probe, Inc.

P.O. Box 656 West Chester, PA 19381-0656 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

spi3spi@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: April 16, 2015

04976-AB

Thinner for SPI SafeShip™ Nonflammable Silver Colloid

Section 1: Identification

Chemical Name/Synonyms..... Thinner for SPI SafeShip™ Nonflammable Ag Colloid

Chemical family..... Mixture

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-527-3887

Worldwide FAX: 1-(703)-741-6090

Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name..... Thinner for SPI SafeShip™ Nonflammable Ag Colloid

CAS #'s..... 7732-18-5; 111-76-2; 1336-21-6

Chemical Formula..... Not available – Mixture

HAZARDS CLASSIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4)

Acute toxicity, Inhalation (Category 4)

Eye irritation (Category 2a)

Skin irritation (Category 2)

GHS Label Elements

Pictogram:



Signal word: Warning

Hazard statements

H302 Harmful if swallowed

H332 May be harmful if inhaled

H313 May be harmful in contact with skin

H320 Causes eye irritation

H315 Causes skin irritation

Precautionary statements:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

Hazardous Material Information System USA

Health..... 1
Fire Hazard..... 0
Reactivity..... 0
Personal Protection.....

NFPA Rating (estimated)

Health..... 1
Flammability..... 0
Reactivity..... 0

Section 2: Composition

Component Name	CAS #	Percent	EINECS/ELINCS
Water	7732-18-5	90-95	231-971-2
Butyl Cellosolve	111-76-2	5-10	203-905-0
Ammonium Hydroxide	1336-21-6	<1	215-647-6

Section 3: Hazard Identification

Emergency overview:

Appearance: Colorless liquid

Flash Point: n/a

Warning!

May cause eye and skin irritation. May be harmful if swallowed, inhaled or absorbed through the skin. May cause respiratory tract irritation. May cause central nervous system depression.

Target Organs: Central nervous system, eyes

Potential Health Effects

Eye: May cause eye irritation. May cause transient corneal injury.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. May cause central nervous system effects such as nausea and headache.

Chronic: Not expected.

Section 4: First Aid Measures

Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Seek medical attention immediately.

Skin: In case of contact, wash with soap and flush skin with plenty of water. Remove contaminated clothing and

shoes. Wash clothing before reuse. Seek medical attention if irritation develops and persists.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Notes to Physician: Treat symptomatically and supportively.

Section 5: Fire Fighting Measures

General Information:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate non-essential personnel from the fire area. Fire fighters should wear full-face, self-contained breathing apparatus in pressure demand, MSHA/NIOSH approved or equivalent and impervious protective clothing.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

Section 6: Accidental Release Measures

General Information:

Use proper protective equipment as indicated in Section 8.

Spills/Leaks:

Provide ventilation. Absorb spill with inert material, such as vermiculite, sand or earth, and place in suitable container for disposal. Avoid run-off into storm sewers and ditches which lead to waterways. Clean up spills immediately. Remove all sources of ignition. Use a spark-proof tool.

Section 7: Handling and Storage

Handling:

Use with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin and clothing.

Storage:

Keep away from sources of ignition. Store in tightly closed container. Store in cool, dry, well ventilated area.

Section 8: Exposure Controls and Personal Protection

Engineering Controls:

Eyewash and safety shower should be readily available. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Butoxyethanol	20 ppm TWA	5 ppm TWA 24 mg/m ³ TWA 700 ppm IDHL	50 ppm TWA 240 mg/m ³ TWA

Ammonia	25 ppm TWA 35 ppm STEL	25 ppm TWA 18 mg/m ³ TWA 300 ppm IDHL	50 ppm TWA 35 mg/m ³ TWA
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OSHA Vacated PELs:

2-Butoxyethanol: 25 ppm TWA; 120 mg/m³ /TWA

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

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

Appearance: colorless

Odor: mild ammonia-like

pH: n/a

Vapor Pressure: n/a

Vapor Density: n/a

Evaporation Rate: n/a

Viscosity: n/a

Boiling Point: n/a

Freezing/Melting Point: n/a

Autoignition Temperature: n/a

Flash Point: n/a

Decomposition Temperature: n/a

Explosion Limits,

Lower: n/a

Upper: n/a

Solubility in water: soluble

Specific Gravity/Density: ~1

Molecular Formula: n/a

Molecular Weight: n/a

Section 10: Stability and Reactivity

Chemical Stability:

Stable under normal storage conditions.

Conditions to Avoid:

Ignitions sources, excess heat.

Incompatibility with Other Materials:

Strong oxidizing agents, strong bases.

Hazardous Decomposition of Products:

Carbon monoxide, carbon dioxide, irritating and toxic fumes and gases.

Hazardous Polymerization:

Will not occur.

Section 11: Toxicological Information**RTECS#:**

CAS# 7732-18-5: ZC0110000

CAS# 111-76-3: KJ8575000

CAS# 1336-21-6: BQ9625000

LD₅₀/LC₅₀ Information:

CAS #:	111-75-2	1336-21-6
Inhalation, mouse, LC50	700 ppm/7H	n/a
Inhalation, mouse, LC50	3380 mg/m ³ /7H	n/a
Inhalation, rat, LC50	450 ppm/4H	n/a
Inhalation, rat, LC50	2900 mg/m ³ /7H	n/a
Draize test, rabbit, eye	100 mg Severe	250 µg Severe
Draize test, rabbit, eye	100 mg/24H Moderate	44 µg Severe
Oral, mouse, LD50	1230 mg/kg	n/a
Oral, rabbit, LD50	300 mg/kg	n/a
Oral, rat, LD50	470 mg/kg	350 mg/kg

Carcinogenicity:

CAS#: 111-76-2 1336-21-6

ACGIH: A3-Confirmed animal carcinogen Not listed**California Prop 65** Not listed Not listed**NTP:** Not listed Not listed:**IARC:** Not listed Not listed**Teratogenicity:** n/a**Reproductive Effects:** n/a**Neurotoxicity:** n/a**Mutagenicity:** n/a**Other Studies:** n/a

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information**Exotoxicity:**

CAS# 111-76-2: LC50, goldfish, 1650 mg/L/96H

LC50, Bluegill sunfish, 1490 mg/L/96H

CAS# 7664-41-4: LC50, Rainbow trout, 0.008 mg/L/24H

LC50, Bluegill sunfish, 0.024-0.093 mg/L/48H

Environmental Fate:

CAS# 111-76-2: An estimated BCF value of 2.5 suggests that bioconcentration in aquatic organisms will be low.

CAS# 7664-41-7: No information found.

Aquatic: n/a

Atmospheric: n/a

Physical: n/a

Section 13: Disposal Considerations

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Consult a licensed profession to dispose of this material. Dissolve or mix with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14: Transport Information

US DOT Hazard Class: None

This substance is considered to be non-hazardous for transport.

IATA (for international shipments): None

This substance is considered to be non-hazardous for air transport.

Section 15: Regulatory Information

United States:

TSCA

CAS# 7732-18-5 is listed on the TSCA inventory.

CAS# 111-76-2 is listed on the TSCA inventory.

CAS# 1336-21-6 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 111-76-2 is listed on the Health & Safety Reporting List. Effective 4-13-89, Sunset 6-30-98.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b:

None of the chemicals in this product are listed under TSCA Section 12b.

TSCA Significant New Use Rule:

None of the chemicals in this product have a SNUR under TSCA.

CERCLA Hazardous Substances and RQs:

CAS# 1336-21-6: 1000 lb final RQ; 454 kg final RQ.

SARA Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS# 111-76-2: Immediate, delayed, fire

CAS# 1336-21-6: Immediate, delayed

Section 313

This material contains 2-Butoxyethanol, <10%, (CAS# 111-76-2) which is subject to the reporting requirements of Section 313 of SARA Title III and 49 CFR Part 373.

Clean Air Act:

CAS# 111-76-2 is listed as a hazardous air pollutant (HAP)

This product does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 1336-21-6 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

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

State (Individual states in the USA)

CAS# 111-76-2 can be found on the following state right to know lists: California, Massachusetts, Minnesota, New Jersey, Pennsylvania.

CAS# 1336-21-6 can be found on the following state right to know lists: California, Massachusetts, New Jersey, Pennsylvania.

California Prop. 65: California No Significant Risk Level:

None of the chemicals in this product are listed under California Prop 65

WGK (Water Danger/Protection):

CAS# 111-76-2:1

CAS# 1336-21-6: 2

Canada

CAS# 111-76-2 has a WHMIS classification of B3, D2B.

CAS# 111-76-2 is listed on the Canadian DSL.

CAS# 1336-21-6 is listed on the Canadian DSL.

Section 16: Other Information**Disclaimer of Liability:**

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such

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