SPI Supplies Division
Structure Probe, Inc.
206 Garfield Ave., West Chester, PA 19380-4512 USA
Phone: 1-(610)-436-5400 **Fax:** 1-(610)-436-5755
sales@2spi.com
http://www.2spi.com
Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: August 16, 2017

02538-AB SPI-Chem™ Silver Nitrate

Section 1.1: Identification

Chemical Name/Synonyms ..... Silver Nitrate, crystal

Product or Trade Name ..... SPI-Chem™ Silver Nitrate

CAS #'s 7761-88-8

Chemical Formula..... $AgNO_3$

Section 1.2: Relevant Uses/Restrictions

Electron dense stain for biological staining applications.

Section 1.3: Supplier of the Safety Data Sheet

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Section 1.4: Emergency telephone number

Emergencies
Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...
Worldwide phone: 1-(703)-741-5970
Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

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

Acute toxicity – Oral (Category 4)
Skin corrosion / irritation (Category 1B)
Serious eye damage / eye irritation (Category 1)
Specific Target Organ Toxicity (repeated exposure) (Category 1)
Oxidizing solids (Category 2)

2.2 Label elements

Pictogram

Signal Word: Danger

Hazard statements:

H272 May intensify fire; oxidizer.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

P264 Wash face, hands and any exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection face protection.
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P220 Keep/ Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P310 Immediately call a POISON CENTER or doctor / physician.
P321 Specific treatment (see … on this label).
P370 + P378 IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO_2 or Halon may provide limited control.
P305 +P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor / physician.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water / shower.
P363 Wash contaminated clothing before reuse.
P304 + P340 + P210 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor / physician.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell.
P330 Rinse mouth.
P331 Do not induce vomiting.
P405 Store locked up.
P501 Dispose of contents / container to an approved waste disposal plant.

2.3 Other Hazards:

No further relevant information available.

Hazardous Material Information System USA

Health 3
Fire Hazard 0
Reactivity 2
Personal Protection .....

NFPA Rating (estimated)

Health 3
Flammability..... 0
Reactivity 2
Special hazard ..... OX

Section 3: Composition

3.1 Substances:

Sliver Nitrate CAS# 7761-88-8 EC# 231-853-9 Weight Percent: 100 %

Section 4: First Aid Measures

4.1 Description of first aid measures:

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Immediate medical attention is required. Call a physician or poison Control Center immediately.

Eye Contact: Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Immediate medical attention is required.

Ingestion: Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Severe skin irritation. Causes severe skin burns. Skin contact can product inflammation and blistering. Severe eye irritation. Causes serious eye damage. May cause corneal injury. May cause blindness. Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing, and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness, or death. Over-exposure by inhalation may cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders: First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

Section 5: Fire Fighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media: Water. CO_2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.

Unsuitable Extinguishing Media: Dry chemical. Foam. Halons.

5.2 Specific hazards arising from the substance or mixture

Hazardous Combustion Products: Silver oxides. Nitrogen oxides.

Specific Hazards: Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.).
The product is not flammable, but it may cause fire when in contact with other material.
Contact with combustible or organic materials may cause fire.
Will accelerate burning when involved in a fire.
Container explosion may occur under fire conditions or when heated.
Silver nitrate mixed with dry powdered magnesium may ignite explosively on contact with a drop of water.
An explosive e fulminate may be formed if silver nitrate is mixed with alcohols.
Highly explosive is formed by the addition of calcium carbide to silver nitrate solution.

5.3 Advice for firefighters

Specific Methods: For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. DO NOT use combustible materials such as sawdust.

Special protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

6.1 Personal precautions

Keep people away from and upwind of spill / leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid dust formation. Remove all sources of ignition. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Methods for containment: Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up: Sweep up and shovel into suitable containers for disposal. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill. Clean contaminated surface thoroughly.

6.4 Reference to other sections

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Technical Measures / Precautions: Provide sufficient air exchange and / or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapors / dust. Do not ingest. Do not smoke. Keep away from combustible material. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures / Storage Conditions: Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Co not store near combustible materials. Store in a segregated and approved area.

Incompatible Materials: Acetylene. Ammonia. Combustible materials. Chlorosulfonic acid. Hydrochloric acid. Sulfuric acid. Nitric acid. Metals. Reducing agents. Ethylene oxide. Charcoal. Ammonium hydroxide. Ethanol. Arsenic. Sulfur. Alkalis. Organic materials.

7.3 Specific end uses

Electron dense stain for biological staining applications.

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection

Workplace exposure limits

United States
Silver Nitrate (CAS# 7761-88-8) OSHA: none NIOSH: none ACGIH: none AIHA WHEEL: none

Canada
Silver Nitrate (CAS# 7761-88-8) Alberta, Ontario, Quebec: 0.01 mg/m^3 TWA (as Ag)
British Columbia: 0.1 mg/m^3 TWA (as Ag); 0.03 mg/m^3 STEL (as Ag)

Australia
Silver Nitrate (CAS# 7761-88-8): 0.01 mg/m^3 TWA (as Ag)

Mexico
Silver Nitrate (CAS# 7761-88-8) none

Biological limit values: No data available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne

levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2.2 Individual protection measures

Eye protection: Goggles
Skin and body protection: Chemical resistant apron. Long sleeved clothing. Gloves.
Respiratory protection: Wear respirator with dust filter.
Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before break and immediately after

8.2.3 Environmental exposure controls

No further relevant information available.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Solid, colorless or white crystals

Odor: Odorless

Odor threshold (ppm): No information available

Taste: Bitter. Metallic

pH: 6-7

Melting point/Freezing point: 212 °C (413.6 °F)

Boiling point/Boiling point range 440 °C (824 °F)

Flash Point: No information available

Evaporation rate: No information available

Flammability (solid, gas): Oxidizer

Upper/lower flammability or explosive limits: No information available.

Vapor Pressure: No information available

Vapor density: 5.8

Specific gravity: 4.35

Solubility: Easily soluble in hot/cold water. Easy soluble in diethyl ether. Slightly soluble in acetone.

Partition coefficient (n-octanol/water): No information available

Autoignition temperature: No information available

Decomposition temperature: No information available

Viscosity: No information available

Explosive properties: No information available

Oxidizing Properties: Oxidizer

9.2 Other information

No further relevant information available.

Section 10: Stability and Reactivity

10.1 Reactivity
Strong oxidizer.

Reactive with reducing agent, combustible materials, organic materials, metals, acids, alkalis.

Incompatible with antimony salts, arsenites, bromides, carbonates, chlorides, iodides, thiocyanates, ferrous salts, hypophosphites, morphite salts, oils, creosote, phosphates, tannic acid, tartrates, vegetable decoctions, and extracts, sodium hydroxide, charcoal, thimerosal, benzalkonium chloride, halogenated acids and their salts, alcohols.

Silver nitrate reacts with acetylene in presence of ammonia to form silver acetylide, a sensitive powerful detonator when dry.

Reaction between silver nitrate and chlorosulfonic acid is violent.

Silver nitrate is reduced by hydrogen sulfide in the dark.

Silver nitrate is easily reduced to metallic silver by ferrous salts, arsenites, hypophosphites, tartrates, sugars, tannins, volatile oils.

Silver nitrate mixed with dry powdered magnesium may ignite explosively on contact with a drop of water.

An explosive fulminate may be formed if silver nitrate is mixed with alcohols.

Mixing calcium carbide with silver nitrate solutions forms silver acetylide, a highly sensitive explosive.

10.2 Chemical Stability
Sensitive to light. Exposure to light accelerated decomposition. Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions
Hazardous polymerization does not occur.

10.4 Conditions to avoid
Incompatible materials. Exposure to light.

10.5 Incompatible materials
Acetylene. Ammonia. Combustible materials. Chlorosulfonic acid. Hydrochloric acid. Sulfuric acid. Nitric acid. Metals. Reducing agents. Ethylene oxide. Charcoal. Ammonium hydroxide. Ethanol. Arsenic. Sulfur. Alkalis. Organic materials.

10.6 Hazardous decomposition products
Silver oxides. Nitrogen oxides (NO_x)

Other information:
Corrosivity: No information available.
Special Remarks on Corrosivity: No information available.

Section 11: Toxicological Information

Information on the likely routes of exposure

Principal Routes of Exposure: Skin. Eyes. Inhalation. Ingestion.

11.1 Information on toxicological effects
A. Acute toxicity

Component Information Silver Nitrate (CAS# 7761-88-8)
LD50/oral/rat = 1173 mg/kg
LD50/oral/mouse = 50 mg/kg
LD50/dermal/rate = No information available
LD50/dermal/rabbit = No information available
LD50/inhalation/rat = No information available
LD50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information
LD50/oral/rat = VALUE-Acute Tox Oral = 1173 mg/kg
LD50/oral/mouse = VALUE-Acute Tox Oral = 50 mg/kg
LD50 /dermal/rabbit = VALUE-Acute Tox Dermal = No information available
LD50/dermal/rat = VALUE-Acute Tox Dermal = No information available
LC50/inhalation/rat =
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available
LC50/inhalation/Mouse =
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

B. Skin corrosion/irritation
Skin contact causes severe skin irritation and possible burns. It may cause dermatitis. It can be absorbed through the skin.

C. Serious eye damage/irritation
Eye contact causes severe irritation and burns. Causes corneal opacification, bleeding conjunctiva, burns of conjunctiva, blindness.

D. Respiratory / Ingestion
Inhalation causes severe irritation of the respiratory tract and mucous membranes with possible chemical burns. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath. May cause nausea and headache. May cause vomiting.

Ingestion causes severe digestive/gastrointestinal tract irritation and can cause burns. Symptoms may include pain and burning in the mouth, violent abdominal pain, a blackening of the skin and mucous membranes, salivation, vomiting of black material, diarrhea, hypermotility, ulcerative gingivitis. May affect kidneys (lesion of kidneys, anuria), lungs (lesion of lungs). Other symptoms of acute silver poisoning may include shock, dizziness, tetany, somnolence, vertigo, coma, convulsions), cardiovascular (fall in blood pressure), respiration (decreased respiration, cyanosis). [Silver Nitrate].

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity

Chronic exposure to Silver nitrate dust or fumes can gradually cause the eyes, nails, inner nose, throat, body organs and skin to develop a bluish-grayish color. This usually takes 2 to 20 years to develop and is permanent.

Systemic absorption of the nitrate and reduction to nitrite may cause rare methemoglobinemia which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, shortness of breath, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate.

Eyes and Skin: Repeated or prolonged application on the skin or eyes causes argyria, a bluish-grayish discoloration of the eyes.

Ingestion: Prolonged or repeated ingestion causes argyria characterized by a permanent blue-slate gray discoloration of the skin, eyes, mucous membranes, and internal organs. Prolonged or repeated ingestion may also affect the liver (hepatitis),kidneys (nephritis), cardiovascular system, behavior/central nervous system (symptoms similar to acute ingestion), and metabolism (weight loss).

Inhalation: Prolonged or repeated inhalation can cause bronchitis. It can also cause argyrosis of the respiratory tract, bluish-graish/blackening of the mucous membranes of the respiratory tract with nasal mucosa showing impregnation of silver nitrate. It may also affect the cardiovascular system, and blood.

E. Germ cell mutagenicity

May affect genetic material.

F. Carcinogenicity

IARC group 2A – Probably Carcinogenic to Humans (nitrate compounds; covers ingested nitrates under conditions that result in endogenous nitrosation).

Not listed by ACGIH – Carcinogens, by NTP, or by IOSHA HCS – Carcinogens.

Is not listed as an Australia – Notifiable Carcinogenic Substance or an Australia – Prohibited Carcinogenic Substance.

G. Reproductive toxicity

No data is available.

Reproductive Effects: May cause adverse reproductive effects.
Developmental Effects: No information available.
Teratogenic Effects: No information available.

H. STOT-single exposure

No information available.

I..STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.
Target organs: Mucous membrane. Skin. Eyes. Lungs.

J. Aspiration hazard

No information available.

Section 12: Ecological Information

12.1 Toxicity

Silver Nitrate CAS# 7761-88-8

Freshwater Fish Species Data:

0.001339-0.001637 mg/L	LC50	Oncorhynchus mykiss	96 h flow-through 1
0.00181-0.00214 mg/L	LC50	Pimephales promelas	96 h static 1
0.00452-0.00638 mg/L	LC50	Pimephales promelas	96 h flow-through 1
0.00512-0.00787 mg/L	LC50	Poecilia reticulate	96 h semi-static 1
0.0064-0.0103 mg/L	LC50	Pimephales promelas	96 h semi-static 1
0.00839-0.1802 mg/L	LC50	Oncorhynchus mykiss	96 h static 1
0.009-0.02 mg/L	LC50	Lepomis macrochirus	96 h flow-through 1
0.0242-0.0484 mg/L	LC50	Lepomis macrochirus	96 h semi-static 1
0.05-0.07 mg/L	LC50	Lepomis macrochirus	96 h static 1
0.0027 mg/L	LC50	Cyprinus carpio	96 h semi-static 1

0.0075 mg/L	LC50	Oncorhynchus mykiss	96 h semi-static 1
0.009 mg/L	LC50	Pimephales promelas	96 h 0

Water Flea Data:

0.0008-0.001 mg/L	EC50	Daphnia magna	48h
0.0008-0.0011 mg/L	EC50	Daphnia magna	48 h
0.0006 mg/L	EC50	Daphnia magna	48 h

12.2 Persistence and degradability
No information available.

12.3 Bio-accumulative potential
No information available.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
No information available.

12.6 Other adverse effects
No information available.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulations.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal.

Does not contain any RCRA F Series wastes, RCRA K Series wastes, RCRA P Series wastes, or RCRA U series wastes.

Section 14: Transport Information

DOT

UN No:	UN1493
Proper Shipping Name:	Silver Nitrate
Hazard Class:	5.1
Subsidiary Risk:	No information available
Packing Group:	II
ERG No:	140
Marine Pollutant:	No data available
DOT RQ (lbs):	No information available

IATA

UN No:	UN1493
Proper Shipping Name:	Silver Nitrate
Hazard Class:	5.1
Subsidiary Risk:	No information available
Packing Group:	II
ERG Code:	5L

Description: No information available

IMDG

UN No: UN1493
Proper Shipping Name: Silver Nitrate
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
Description: No information available
IMPG Page: No information available
Marine Pollutant: No information available

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture

International Inventories: Silver Nitrate CAS# 7761-88-8

US TSCA Present
Korea KECL Present Ke-31281
Philippines Present (PICCS)
Japan ENCS Present (1)-8
China Present
Australia (AICS) Present
EINCEC-NO. Present (231-853-9)

U.S. TSCA: Silver Nitrate CAS# 7761-88-8

TSCA Section 5(a)2 – Chemicals with Significant New Use Rules (SNURS) – Not applicable
TSCA 8(d) – Health and Safety Reporting – Not applicable

CERCLA / SARA Silver Nitrate CAS# 7761-88-8

CERCLA – Hazardous Substances and their Reportable Quantities
1 lb. final RQ
0.454 kg final RQ
Section 302 Extremely Hazardous Substances and TPQs
None
Section 302 Extremely Hazardous Substances and RQs
None
Section 313 – Chemical Category
None
Section 313 – Reporting *de minimis*
None

U.S. State Regulations: Silver Nitrate CAS# 7761-88-8

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1672
New Jersey – Discharge Prevention – List of Hazardous Substances: Present
Pennsylvania RTK: Environmental Hazard
Pennsylvania RTK – Environmental Hazard List: Present
New York Release Reporting – List of Hazardous Substances: 1 lb. RQ
Louisiana Reportable Quantity List for Pollutants: 1 lb. final RQ, 0.454 kg final RQ
California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986

Silver Nitrate, CAS# 7761-88-8, does not contain chemicals known to the State of California to cause Cancer, Developmental Toxicity, Male Reproductive Toxicity, or Female Reproductive Toxicity.

CANADA

WHMIS hazard class

C Oxidizing materials
E Corrosive material

Silver Nitrate

C E
E 1.7% (0.1N), 3.4% (0.2 N)

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

WHMIS Ingredient Disclosure List: Silver Nitrate 1%
Canada DSL: Listed
Canada NDXL: Not Listed
CEPA Schedule 1 – Toxic Substances: Not Listed
CEPA – 2010 Greenhouse Gases Subject to Mandatory Reporting: Not Listed

EU Classification:

R-phrase(s)

R8 Contact with combustible material may cause fire
R34 Causes burns
R50 Very toxic to aquatic organisms
R53 Nay cause long-term adverse effects in the aquatic environment

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions / safety data sheets.
S1/2 Keep locked up and out of the reach of children
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Component	Classification	Safety Phrases
Silver Nitrate	C; R34 N; R50 R53 O; R8	S1/2 S26 S36/37/39 S45 S60 S61

The product is classified in accordance with Annex VI to Directive 67/548/EEC.

Indication of Danger:

C – Corrosive 

N – Dangerous for the environment 

O – Oxidizing 

15.2 Chemical Safety Assessment – No additional information available.

Date of Preparation: 16 August 2017

Abbreviations and acronyms
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
CMRG: Chemical Manufacturer's Recommended Guidelines
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological
vPvB: very Persistent and very Bio-accumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling

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 medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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