

SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: December 5, 2014

SPI# 04996-AB, 04996-DA
SPI Flash-Dry™ Silver Paint Thinner

Section 1: Identification

Chemical Name/Synonyms..... Silver Paint Thinner

Chemical family..... Solvent 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..... Flash Dry Silver Paint Thinner

CAS #'s..... 78-93-3; 108-10-1

Chemical Formula..... mixture

OSHA Hazards

Flammable liquid, Target Organ Effect, Toxic by inhalation, Irritant

Target Organs: Central Nervous System

GHS Classification

Flammable liquids (Category 2)

Acute toxicity, Oral (Category 5)

Acute toxicity, Inhalation (Category 4)

Skin irritation (Category 3)

Eye irritation (Category 2A)

Specific target organ toxicity – single exposure (Category 3)

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.

H303 May be harmful if swallowed

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazardous Material Information System USA

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

NFPA Rating (estimated)

Health..... 2
Flammability..... 3
Reactivity..... 0

Section 2: Composition

Component Name	CAS #	Wt Percent	EINECS/ELINCS
Methyl Ethyl Ketone	78-93-3	>30	201-159-0
Methyl Isobutyl Ketone	108-10-1	>30	203-550-1

Section 3: Hazard Identification

Emergency overview:

Appearance: Colorless liquid.

Flash Point: 3°F Tag closed cup method

Warning!

Flammable liquid and vapor.

Target Organs: Eyes, Skin, Respiratory System, Liver, Central Nervous System

Potential health effects (acute and chronic):

Symptoms of exposure:

Effects of eye exposure: Causes eye irritation. May result in corneal injury. May cause painful sensitization to light. Contact produces irritation, tearing, and burning pain.

Effects of skin contact: May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause irritation and/or dermatitis.

Effects of ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Effects of inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. Irritation may lead to chemical pneumonitis and pulmonary edema. Exposure produces central nervous system depression. May produce numbness in the extremities. May cause liver abnormalities. May cause visual abnormalities.

Target Organs: Central nervous system, liver, eyes, skin, mucous = membranes.

Routes of entry: Inhalation, ingestion or eye or skin contact.

Section 4: First Aid Measures

Emergency and first aid procedures:

Get medical assistance for all cases of over-exposure.

Skin: Get medical aid. Immediately flush skin thoroughly with water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse.

Eyes: Get medical aid immediately. Immediately flush thoroughly with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Do not allow victim to rub or keep eyes closed.

Inhalation: Get medical aid immediately. Remove to fresh air immediately. Artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased, apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Ingestion: Do NOT induce vomiting. If conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Notes to Physician: Treat symptomatically and supportively.

Section 5: Fire Fighting Measures

Flash Point.....3°F

Fire Extinguishing Media:

For small fires use dry chemical, CO₂, or "alcohol" foam, water spray to cool fire-exposed containers and disperse vapor; water on fire itself may be ineffective. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

Firefighting Procedure:

Wear self-contained breathing apparatus in pressure-demand full protective gear.

Fire and explosion hazards:

Dangerous fire and explosion hazard. Vapor can travel distance to ignition source and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below published autoignition or ignition temperatures. Ignition temperatures decrease with

increasing vapor volume and vapor/air contact time and are influenced by pressure changes. Ignition may occur at typical elevated temperature process conditions, especially in process operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs.

Section 6: Accidental Release Measures

Spill Response:

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under exposure/personal protection, including self contained breathing apparatus. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Absorb spill with an absorbent, non-combustible material such as earth, sand or vermiculite. Scoop up with non-sparking tool and containerize for proper disposal. Comply with federal, state, and local regulations on reporting release. Refer to regulatory information for reportable quantity and other regulatory data.

Disposal considerations:

EPA (Environmental Protection Agency) waste numbers:

CAS# 78-93-3 - waste number U159 (Ignitable waste, Toxic waste)

CAS# 108-10-1 - waste number U161 (Ignitable waste)

Section 7: Handling and Storage

Handling:

Use only in a well-ventilated area. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin and clothing. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof = equipment. Avoid contact with heat, sparks and flame. Empty containers may contain residue - do not pressurize, or expose empty containers to heat, sparks or open flames. Do not take internally. Eye wash and safety equipment should be readily available.

Storage:

Keep away from sources of ignition. Store in a flammables area. Store in cool, dry well ventilated area.

Section 8: Exposure Controls and Personal Protection

An eyewash facility and a safety shower should be available. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Airborne Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PEL
Methyl Ethyl Ketone	200 ppm TWA	200 ppm TWA	200ppm TWA
	300 ppm STEL	590 mg/m ³ TWA	590 mg/m ³ TWA
	3000 ppm IDHL		
Methyl Isobutyl Ketone	50 ppm TWA	50 ppm TWA	100 ppm TWA
	75 ppm STEL	205 mg/m ³ TWA	410 mg/m ³ TWA
	500 ppm IDHL		

OSHA Vacated PELS:

Methyl Ethyl Ketone 200 ppm TWA; 590 mg/m³ TWA; 300 ppm STEL; 885 mg/m³ = STEL

Methyl Isobutyl Ketone 50 ppm TWA; 205 mg/m³ TWA; 75ppm STEL; 300 mg/m³ = STEL

Personal Protective Equipment:

Eyes: Wear chemical safety goggles as described by OSHA's eye and face – protection regulations in 29 CFR 1910.133 or the European Standard = EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in **29CFR = 1910.134** or the European Standard EN149. Always use a NIOSH or European = Standard approved respirator when necessary.

Section 9: Physical and Chemical Properties

	Methyl Isobutyl Ketone	Methyl Ethyl Ketone
Boiling Point.....	760 mm Hg : 80°C	117.4°C
Formula Weight.....	72.1 g/mol	100.2 g/mol
Coeff. of Water/Oil Dist.	NOT DETERMINED	NOT DETERMINED
pH (Liquids Only).....	NOT DETERMINED	NOT DETERMINED
Melting Point.....	-87°C	-84°C
Vapor Pressure.....	71.2 mm Hg	15.7 mm Hg
Vapor Density/Air is 1...	2.5	3.5
Solubility In Water.....	soluble	insoluble
Appearance and Color.....	Mixture is a clear, colorless liquid	
Specific Gravity(H ₂ O =3D 1):	0.8050	0.8010
Evaporation Rate	2.7(ether=1)	1.6(butyl acetate=1)
Odor.....	Mixture has a sweet smell	

Section 10 Stability and Reactivity**Stable:**

Yes

Hazardous Polymerization:

May occur.

Hazardous Decomposition Products:

CO_x (Carbon Dioxide / Carbon Monoxide), irritating and toxic fumes = and = 20 gases

Solubility in water: partial

Specific Gravity/Density: 1.71

Molecular Formula: n/a

Molecular Weight: n/a: Stability and Reactivity

Conditions to avoid:

Heat, Incompatible ignition sources, Contact with ignition source.

Materials to avoid:

Oxidizing agents; Reducing agents; Caustics and strong bases, such as sodium hydroxide, ammonium hydroxide, potassium hydroxide, calcium hydroxide, ammonia; copper; amines; isocyanates; chlorosulfonic acid; fuming sulfuric acid; peroxides; pyridine; potassium-tert-butoxide.

Section 11: Toxicological Information

RTECS #: CAS# 78-93-3: EL6475000

CAS# 108-10-1: SA9275000

Toxicity data: CAS# 78-93-3 CAS# 108-10-1

Draize test, Rabbit, skin: 500mg/24H Moderate 500mg/24H Mild

Inhalation, Mouse LC50 32 gm/m³/4H 23300 mg/m³

Inhalation, rat LC50 23500 mg/m³/8H 100g/m³

Oral, Mouse LD50 4050 mg/kg 1900 mg/kg

Oral, rat LD50 2737 mg/kg 2080 mg/kg

Carcinogenicity:

CAS# 78-93-3: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

CAS# 108-10-1: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

Epidemiology: No information available

Teratogenicity: CAS# 78-93-3 CAS# 108-10-1 Embryo or Fetus: death ihl-rat

TCLo=1000ppm ihl-mouse TCLo=3000ppm/6H

Musculoskeletal abnormalities ihl-rat TCLo+ 1000ppm ihl-rat = TCLo=300ppm/6H

Reproductive effects:

No information available

Neurotoxicity:

No information available

Mutagenicity:

CAS# 78-93-3: Sex chromosome loss: *S.cerevisiae* 33800 = ppm. See entry in RTECS for complete information.

Section 12: Ecological Information

Ecotoxicity:

CAS# 78-93-3

CAS# 108-10-1

Fish: Fathead Minnow

LC50 3220 mg/L; 96H

505 mg/L; 96H

Unspecified ria: *Phytobacterium*

phosphoreum:

EC50=3373 mg/L; 30min

EC50=79.6 mg/L; 5 min=09

Environmental:

CAS# 78-93-3: Evaporates in water with half life of 3 days for rivers to 2 days for lakes; is not expected to bioconcentrate in aquatic organisms. Photodegrades in air with half life of 3 days.

CAS# 108-10-1: Undergoes direct photolysis and volatilization in water. Bioconcentration is not highly predicted. In air, will react with hydroxyl radicals or undergo direct photolysis.

Other: See Handbook of Environmental Fate and Exposure Data for additional information.

Section 13: Disposal Considerations

Consult state and local hazardous waste regulations to ensure complete and accurate classification.

US EPA guidelines for hazard classification determination are listed in 40 CFR Parts 261.3.

RCRA P-Series: None listed

RCRA U-Series: CAS# 78-93-3: waste number U159 (Ignitable, Toxic Waste)

CAS# 108-10-1: waste number U161 (Ignitable Waste)

Section 14: Transport Information

Shipping information:

Shipping name: Paint Related Material

Hazard Class: 3

UN/NA Class: UN1263

Label: Flammable liquid

Packing Group: II

Section 15: Regulatory Information

CAS# 78-93-3 CAS# 108-10-1

TSCA: Both listed on TSCA inventory

Health & Safety Reporting List: Both, Effective Date Oct. 4, 1982

Sunset Date Oct. 4, 1992

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

Section 12b:

CAS# 108-10-1: 4/12b

TSCA Significant New Use Rule: None of the chemicals in this material = have a SNUR under TSCA.

Section 302 (RQ): CAS# 78-93-3: final RQ =3D 5000 pounds (2270 kg)

CAS# 108-10-1: final RQ =3D 5000 pounds (2270 kg)

Section 302 (TPQ): None of the chemicals in this product have a TPQ.

SARA Codes: CAS# 78-93-3: acute, flammable
CAS# 108-10-1: acute, chronic, flammable, reactive

Section 313:

This material contains Methyl ethyl ketone (CAS# 78-93-3, ~50%) and Methyl isobutyl ketone (CAS# 108-10-1, ~50%) which are subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act: CAS# 78-93-3 and CAS# 108-10-1 are listed as hazardous air pollutants (HAP). This material does not contain any Class 1 Ozone depleters, nor any Class 2 Ozone depleters.

Clean Water Act. None of the chemicals in this product are listed as hazardous Substances under the CWA, nor as Priority Pollutants under the CWA, nor as Toxic Pollutants under the CWA.

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

State Right to Know Lists: CAS# 108-93-3 and CAS# 108-10-1 are listed with California, Florida, Massachusetts, Minnesota, New Jersey, and Pennsylvania.

California Prop. 65:

California No Significant Risk Level:
None of the chemicals in this product are listed.

INTERNATIONAL REGULATIONS

Hazard Symbols: CAS# 78-93-3: XI F
CAS# 108-10-1: XN F

Risk Phrases: R11 Highly flammable
R20 Harmful by inhalation
R36/37 Irritating to eyes and respiratory system
R66 Repeated exposure may cause skin dryness or cracking
R67 Vapors may cause drowsiness and dizziness

Safety Phrases: S2 Keep out of reach of children
S9 Keep container in a well-ventilated place
S16 Keep away from sources of ignition - No smoking
S29 Do not empty into drains

WGK (Water Danger/Protection): CAS# 78-93-3: 1; CAS# 108-10-1: 1

CANADA LISTS: CAS# 78-93-3 and CAS# 108-10-1 are listed on Canada's DSL = List and on Canada's Ingredient Disclosure List. CAS# 787-93-3 has a WHMIS classification of B2, D2A. CAS# 108-10-1 has a WHMIS classification of B2, D2B.

Section 16: Other Information

Disclaimer of Liability:

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