SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: December 5, 2014

SPI #01709-BA, 01717-BA Tungsten Wire;

SPI#01800-AB Tungsten Boats;

SPI#01801-BA, 01802-BA, 01803-BA Tungsten Wire Baskets;

SPI#4120W-BA, 4120W-MB Tungsten Grids

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Section	1 ·	Identiti	ıcatı∩n
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Chemical Name/Synonyms...... Tungsten

Chemical family..... metal

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...... SPI #01709-BA, 01717-BA Tungsten Wire;

SPI#01800-AB Tungsten Boats;

SPI#01801-BA, 01802-BA, 01803-BA Tungsten Wire Baskets;

SPI#4120W-BA, 4120W-MB Tungsten Grids

CAS #'s...... 7440—33-7

Chemical Symbol..... W

OSHA Hazards

Not classified as hazardous according to OSHA.

GHS

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

Hazardous Material Information System USA

NFPA Rating (estimated)

Section 2: Composition

Component Name CAS # Percent Tungsten 7440-33-7100% 100 %

EINECS NUMBER: 231-143-9

RTECS#: YO7175000

Section 3: Hazard Identification

Hazard description: not applicable

Appearance: gray

Flash Point: not applicable Potential Health Effects: not applicable

Section 4: First Aid Measures

General Information: No special measures required

Eyes: Rinse opened eye for several minutes under running water. If symptoms persist, seek medical attention.

Skin: Generally the product does not irritate the skin.

Ingestion: Seek medical attention.

Inhalation: Seek medical treatment in case of complaint.

Section 5: Fire Fighting Measures

General Information: Product is not flammable. Use suitable extinguishing agents for surrounding fire.

Protective Equipment: No special measures are required.

In case of fire, metal oxide fume may be released.

Section 6: Accidental Release Measures

General Information: Do not allow material to be released to the environment without proper government permits.

Spills/Leaks: Pick up mechanically. Transfer to suitable container for proper disposal or salvage.

Section 7: Handling and Storage

Handling: Keep container tightly closed. Wash thoroughly after handling. Avoid contact with skin and eyes. Do not inhale or ingest.

Storage: Store in cool, dry pace in tightly closed containers.

Section 8: Exposure Controls and Personal Protection

Engineering Controls:

No further data.

Exposure Limits:

Chemical Name ACGIH TLV mg/m³
Tungsten & compounds 1; 3 STEL (soluble compounds)

5; 10 STEL (insoluble compounds)

Other Countries:

Denmark TWA 5
Netherlands MAC-TTG 5
Norway TWA 5

Poland 5 (fume and dust)

Russia 2-STEL

Sweden NGV 5

United Kingdom TWA 5; 10-STRL

Personal Protective Equipment

Eyes: Safety glasses

Skin: Not required

Clothing: Protective work clothing

Respirators: Not required

Engineering Controls: The usual precautionary measures for handling chemicals should be followed.

Section 9: Physical and Chemical Properties

Physical State: metal wire **Appearance:** gray

Chemical Formula W Molecular Weight 183.85

Odor: odorless
pH: not applicable
Vapor Pressure: not determined

Vapor Density:not determinedEvaporation Rate:not determined

Viscosity: not determined

Boiling Point: 5900°C

Freezing/Melting Point: 3410°C
Autoignition Temperature: not determined

Flash Point: not determined

Decomposition Temperature: not determined

Explosion Limits, Lower: not determined not determined

Solubility in water:Specific Gravity/Density:

19.3 g/cm³ @ 20° C

Section 10: Stability and Reactivity

Chemical Stability: Decomposition will not occur if used and stored according to specifications.

Incompatibility with Other Materials: Oxidizing agents

Hazardous Decomposition of Products: None known

Dangerous Reactions: None known

Section 11: Toxicological Information

Skin: Mild skin irritant.

Eyes: Mild eye irritant.

May be harmful by ingestion, inhalation, or skin absorption. To the best of our knowledge the toxicological properties of this material have not been fully investigated.

Section 12: Ecological Information

General: Do not allow material to be released to the environment without proper government permits.

Section 13: Disposal Considerations

General: Recycle material where possible. Consult state, local or national regulations to ensure proper disposal. Disposal must be made according to official regulations.

Section 14: Transport Information

Not a hazardous material for transportation.

US DOT Hazard Class: none

IATA (for international shipments): none

Section 15: Regulatory Information

Observe the general safety regulations when handling chemicals. For use only by technically qualified individuals.

National regulations:

TSCA Inventory: 7440-33-7 is listed. SARA: 7440-33-7 is not listed.

Canadian DSL: 7440-33-7 is listed.

Observe the general safety regulations when handling chemicals. For use only by technically qualified individuals.

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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