

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: March 5, 2018

SPI Catalog # 02570-AB

SPI-Chem™ Haematoxylin (Ehrlichs) Stain Powder

Section 1.1: Identification

Chemical Name/Synonyms Haematoxylin Stain; Haematoxylin hydrate

Product or Trade Name SPI-Chem™ Haematoxylin (Ehrlichs) Stain Powder for LM

CAS #'s 517-28-2

Chemical Formula..... C₁₆H₁₄O₆·H₂O

Section 1.2: Relevant Uses/Restrictions

Chemical stain for light microscopy.

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 oral toxicity (category 4)

Skin corrosion/ irritation (category 2)

Serious Eye Damage/ Eye Irritation (category 2A)

Specific target organ toxicity – single exposure (Category 3) (Respiratory system)

2.2 Label elements

Pictogram



Signal Word: Warning

Hazard statements:

- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation

Precautionary statements:

- P264 Wash face, hands, and any exposed skin thoroughly after handling.
- P270 Do not eat, drink, or smoke when using this product.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P271 Use only outdoors or in a well-ventilated area.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take of contaminated clothing and wash before reuse.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
- P330 Rinse mouth.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other Hazards not otherwise classified (HNOC): None identified.

Hazardous Material Information System USA (estimated)

Health 2
Fire Hazard 1
Reactivity 0
Personal Protection

NFPA Rating (estimated)

Health 2
Flammability..... 1
Reactivity 0

Section 3: Composition

3.1 Substance:

Haematoxylin hydrate CAS No. 517-28-2 EINECS No. 208-237-3 ~100 %

Section 4: First Aid Measures

4.1 Description of first aid measures:

General Advice: If symptoms persist, call a doctor/ physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Seek medical attention.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention.

Ingestion: Clean mouth with water and drink plenty of water afterwards. Give nothing by mouth to an unconscious person. Seek medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed: None reasonably foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

Use water spray, alcohol resistant foam, dry chemical, or carbon dioxide.

5.2 Special hazards arising from the substance or mixture:

Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products: Carbon monoxide, Carbon dioxide

5.3 Advice 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:

Ensure adequate ventilation.
Use personal protective equipment.
Avoid dust formation.

6.2 Environmental precautions:

Should not be released into the environment.
See Section 12 for additional ecological information.

6.3 Methods and material for containment and cleaning up:

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Wear personal protective equipment.
Ensure adequate ventilation.
Avoid dust formation.
Do not get in eyes, on skin, or on clothing.
Avoid ingestion and inhalation.

7.2 Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed in a dry, cool, and well-ventilated place.

7.3 Specific end uses:

Chemical stain for light microscopy.
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:

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological limit values: No data available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.
Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.2 Individual protection measures:

Eye/face protection:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tightly fitting safety goggles.

Skin and body protection:

Long sleeved clothing.

Respiratory protection:

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.

8.2.3 Environmental exposure controls:

Handle in accordance with good industrial hygiene and safety practice.

This material should not be released to the environment.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance: Amber colored solid powder

Odor: No data available

Odor threshold: No data available

pH: No data available

Melting point/Freezing point: 100-120 °C (212-248 °F)

Boiling point/Boiling point range: No data available

Flash Point: No data available

Evaporation rate: Not applicable

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor Pressure: Negligible

Vapor density: Not applicable

Specific gravity: No information available

Solubility: Soluble in hot water

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

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: Not applicable

Explosive properties: No data available

Oxidizing Properties: No data available

Molecular formula: C₁₆H₁₄O₆·H₂O

Molecular weight: 302.27

9.2 Other information: No additional information available.

Section 10: Stability and Reactivity

10.1 Reactivity: None known, based on information available.

10.2 Chemical Stability: Stable under normal conditions.

10.3 Possibility of Hazardous Reactions: None under normal processing.

10.4 Conditions to avoid: Incompatible products. Excess heat. Avoid dust formation.

10.5 Incompatible materials: Strong oxidizing agents.

10.6 Hazardous decomposition products: Carbon monoxide; Carbon dioxide.

Section 11: Toxicological Information

Information on the likely routes of exposure:

11.1 Information on toxicological effects:

A. Acute toxicity:

Benz[b]indeno[1,2-d]pyran-3,4,6a,9,10(6H)-pentol,7,11b-dihydro-, cis-(+)-
LD50 (Rat) 400 mg/kg CAS# 517-28-2

B. Skin corrosion/irritation: No information available.

C. Serious eye damage/irritation: No information available.

D. Respiratory or skin sensitization: No information available.

E. Germ cell mutagenicity: No information available.

F. Carcinogenicity:

Benz[b]indeno[1,2-d]pyran-3,4,6a,9,10(6H)-pentol,7,11b-dihydro-, cis-(+)-
Not listed by IARC, NTP, ACGIH, OSHA, MEXICO CAS# 517-28-2

G. Reproductive toxicity: No information available.

H. STOT-single exposure: Respiratory system.

I. STOT-repeated exposure: None known.

J. Aspiration hazard: No information available.

Other adverse effects: Tumorigenic effects have been reported in experimental animals. The toxicological properties have not been fully investigated.

Section 12: Ecological Information

12.1 Toxicity: Do not empty into drains.

12.2 Persistence and degradability: Soluble in water. Persistence is unlikely based on information available.

12.3 Bio-accumulative potential: No information available.

12.4 Mobility in soil: Mobility is likely, due to solubility in water.

12.5 Results of PBT and vPvB assessment: No information available.

12.6 Other adverse effects: No information available.

Section 13: Disposal Considerations

Waste Disposal Methods:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14: Transport Information

DOT: Not regulated.

IATA: Not regulated.

IMDG: Not regulated.

Section 15: Regulatory Information

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

U.S. Federal Regulations:

TSCA: CAS # 517-28-2 is listed on the TSCA Inventory.

TSCA 12(b): Not applicable

SARA 313: Not applicable

SARA 311/312 Hazard Categories:

Acute Health Hazard:	yes
Chronic Health Hazard:	no
Fire Hazard:	no
Sudden Release of Pressure Hazard:	no
Reactive Hazard:	no

CWA (Clean Water Act): Not applicable.

Clean Air Act: Not applicable.

OSHA Occupational Safety and Health Administration: Not applicable.

CERCLA: Not applicable.

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations: Not applicable.

U.S. Department of Transportation:

Reportable Quantity (RQ): no
DOT Marine Pollutant: no
DOT Severe Marine Pollutant: no

U.S. Department of Homeland Security:

This product does not contain any DHS chemicals.

Other International Regulations:

International Inventories:

Listed on DSL, PICCS, ENCS, AICS, IECSC, KECL.

Mexico – Grade: No information available.

15.2 Chemical Safety Assessment: Has not been carried out.

Date of Preparation: 05 March 2018

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
ATE: Acute Toxicity Estimates
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:

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levels could have substantially different properties.