

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: January 15, 2018

SPI Catalog # 02621-AB

SPI-Chem™ s-Collidine Buffer Kit,

s-Collidine component

Section 1.1: Identification

Chemical Name/Synonyms s-Collidine; sym-Collidine, 2,4,6-Trimethylpyridine

Product or Trade Name SPI-Chem™ s-Collidine

CAS #'s 108-75-8

Chemical Formula..... C₈H₁₁N

Section 1.2: Relevant Uses/Restrictions

Laboratory chemical used in buffers in the microscopy laboratory.

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)

Flammable liquids (Category 3)

Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2A)
STOT SE (Category 3) respiratory system

2.2 Label elements

Pictogram



Signal Word: Danger

Hazard statements:

H226 Flammable liquid and vapor.
H302 + H332 Harmful if swallowed or if inhaled.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/ eye protection/ face protection, protective clothing.
P240 Ground/bond container and receiving equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P303 + P261 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P322 Specific measures (see on this label).
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P304 + P341 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P330 Rinse mouth.
P370 + P378 In case of fire: use for extinction: CO₂, sand, extinguishing powder. Do not use water.
P362 Take off immediately all contaminated clothing and wash it before reuse.
P405 Store locked up.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container in accordance with local/regional/national/international regulations.

2.3 Other Hazards:

Hazardous Material Information System USA

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

NFPA Rating (estimated)

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

Section 3: Composition

3.1 Substances:

Name: Sym-Collidine
CAS #: 108-75-8
EC #: 203-613-3
Formula: C₈H₁₁N
Molecular weight: 121.18 g/mol

Section 4: First Aid Measures

4.1 Description of first aid measures:

General information:

Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest, provide artificial respiration.

Inhalation:

Supply fresh air.
If required, provide artificial respiration.
Keep patient warm.
Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

Skin Contact:

Immediately wash with water and soap and rinse thoroughly.

Eye Contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Ingestion:

Immediately call a doctor.

4.2 Most important symptoms and effects, both acute and delayed:

No further relevant information available.

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

No further relevant information available.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing media: CO₂, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet.

5.2 Special hazards arising from the substance or mixture:

No further relevant information available.

5.3 Advice for firefighters:

Special protective equipment and precautions for firefighters:

Mouth respiratory protective device.

Section 6: Accidental Release Measures

6.1 Personal precautions:

Wear protective equipment.

Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to Section 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Ensure good ventilation/ exhaustion at the workplace.

Prevent formation of aerosols

Information about protection against explosions and fires:

Keep ignition sources away.

Do not smoke.

Protect from heat.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

7.3 Specific end uses:

Laboratory chemical used in buffers in the microscopy laboratory.
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: No components with limit values requiring monitoring present.

Biological limit values: No additional information available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

8.2.2 Individual protection measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution, use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
The selection of the glove material must take into consideration the penetration times, rates of diffusion, and the degradation of glove material.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles.

8.2.3 Environmental exposure controls:

No additional relevant information available.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance: Colorless liquid

Odor: Characteristic

Odor threshold: Not determined

pH: Not determined

Melting point/Freezing point: Undetermined

Boiling point/Boiling point range: 170 °C (338 °F)

Flash Point: 58 °C (136 °F)

Evaporation rate: Not determined

Flammability (solid, gas): Not flammable

Upper/lower flammability or explosive limits: Not determined

Vapor Pressure: Not determined

Density at 20 °C (68 VF): 0.917 g/cm³ (7.652 lbs/gal)

Vapor density: Not determined

Relative density: Not determined

Solubility in/ Miscibility with water: Not miscible or difficult to mix

Partition coefficient (n-octanol/water): Not determined

Auto-ignition temperature: Not determined

Decomposition temperature: Not determined

Viscosity:

Dynamic: Not determined

Kinematic: Not determined

Organic solvents: 100.0 %

VOC content: 100.0 %

9.2 Other information: No further relevant information available.

Section 10: Stability and Reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical Stability:

Thermal decomposition: No decomposition if used according to specifications.

10.3 Possibility of Hazardous Reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

Section 11: Toxicological Information

Information on the likely routes of exposure

11.1 Information on toxicological effects:

A. Acute toxicity:

CAS # 108-75-8 Sym-Collidine LD50, oral rat 400 mg/kg

B. Skin corrosion/irritation:

No irritant effect.

C. Serious eye damage/irritation:

No irritating effect.

D. Respiratory or skin sensitization:

No sensitizing effects known.

E. Germ cell mutagenicity:

No further relevant information available.

F. Carcinogenicity:

IARC (International Agency for Research on cancer): Substance is not listed.

NTP (National Toxicology Program): Substance is not listed.

OSHA-Ca (Occupational Safety Health Administration): Substance is not listed.

G. Reproductive toxicity: No further relevant information available.

H. STOT-single exposure: No further relevant information available.

I. STOT-repeated exposure: No further relevant information available.

J. Aspiration hazard: No further relevant information available.

Section 12: Ecological Information

12.1 Toxicity:

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: Aquatic toxicity: No further relevant information available.

12.3 Bio-accumulative potential: Aquatic toxicity: No further relevant information available.

12.4 Mobility in soil: Aquatic toxicity: No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other adverse effects:

Water hazard class 2 (Self-assessment): Hazardous for water.

Do not allow product to reach ground water, water course, or sewage system.

Danger to drinking water if even small quantities leak into the ground.

No further relevant information available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Section 14: Transport Information

DOT:

UN Number: UN1992
UN proper shipping name: Flammable liquids, toxic, n.o.s. (Sym-Collidine)
Class: 3 Flammable liquids
Label: 3(6.1)
Packing group: III

IATA:

UN Number: UN1992
UN proper shipping name: Flammable liquids, toxic, n.o.s. (Sym-Collidine)
Class: 3 Flammable liquids
Label: 3(6.1)
Packing group: III

IMDG:

UN Number: UN1992
UN proper shipping name: Flammable liquids, toxic, n.o.s. (Sym-Collidine)
Class: 3 Flammable liquids
Label: 3(6.1)
Packing group: III

Environmental hazards: Not applicable

Special precautions for user: Warning: Flammable liquids.

Danger code (Kemler): 30

EMS Number: F-E,S-D

Stowage Category: A

Section 15: Regulatory Information

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

SARA Section 355 (Extremely hazardous substances): Substance is not listed.

SARA Section 313 (Specific toxic chemical listings): Substance is not listed.

TSCA (Toxic Substances Control Act): Substance is listed.

California Prop. 65:

Substance is not listed as known to cause cancer.
Substance is not listed as known to cause reproductive toxicity for the female or for the male.
Substance is not listed as known to cause developmental toxicity.

Carcinogenic categories:

EPA (Environmental Protection Agency) – substance is not listed.
TLV (Threshold Limit Value established by ACGIH) - Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health) – Substance is not listed.

15.2 Chemical Safety Assessment: Has not been carried out.

Date of Preparation: 15 January 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:

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 or fluids.

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