

SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: May 31, 2017

SPI Catalog #'s 02813-AB, 02813-AF

SPI-Chem™ Araldite® 506 Resin

Section 1.1: Identification

Chemical Name/Synonyms Araldite 506 Epoxy Resin

Product or Trade Name SPI-Chem™ Araldite® 506 Resin

CAS #'s 25068-38-6; 2426-08-6

Chemical Formula..... mixture

Section 1.2: Relevant Uses/Restrictions

Epoxy resin monomer

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)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Respiratory irritation (Category 3)

Skin sensitization (Category 1)

Acute aquatic toxicity (Category 2)

Chronic aquatic toxicity (Category 2)

2.2 Label elements

Pictogram



Signal Word: Warning

Hazard statements:

- H303 May be harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H333 May be harmful if inhaled.
- H335 May cause respiratory irritation.
- H401 Toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- P210 Keep away from heat/ sparks/ open flames/ hot surfaces – No smoking.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P391 Collect spillage.
- P404 Store in closed container. Store upright.
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards otherwise not classified (HNOC) or not covered by GHS: none

Results of PBT and vPvB assessment:

- PBT: Not applicable
- vPvB: Not applicable

Hazardous Material Information System USA

- Health 2
- Fire Hazard 2
- Reactivity 0
- Personal Protection

NFPA Rating (estimated)

- Health 2
- Flammability..... 2
- Reactivity 0

Section 3: Composition

3.1 Substances: Not applicable

3.2 Mixtures: Mixture of substances listed below with nonhazardous additions.

| | | |
|------------------|-------------------------------------------------------------------------------------------------------|---------|
| CAS # 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700) | 50-100% |
| CAS # 2426-08-6 | Butyl glycidyl ether | 10-25% |

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation:

Supply fresh air and to be sure call for a doctor.
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. If symptoms persist, consult a doctor.

Ingestion:

If symptoms persist consult 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 agents: CO₂, extinguishing powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

No special measures required.

Section 6: Accidental Release Measures

6.1 Personal precautions: Not required.

6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.

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.

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: Protect from heat.

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
Epoxy resin monomer
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 for components with limit values:

| | |
|-----------|----------------------------------------------------------------|
| 2426-08-6 | Butyl glycidyl ether |
| PEL | Long-term value: 270 mg/m ³ , 50 ppm |
| REL | Ceiling limit value: 30 mg/m ³ , 5.6 ppm *15 min |
| TLV | Long-term value: 16 mg/m ³ , 3 ppm Skin; DSEN |

Biological limit values: No further relevant information available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

8.2.2 Individual protection measures:
Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device.
In case of intensive or longer exposure 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.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

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 further 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: No determined

Melting point/Freezing point: Not determined

Boiling point/Boiling point range: Not determined

Flash Point: 78 °C (172 °F)

Evaporation rate: Not determined

Flammability (solid, gas): Not flammable

Upper/lower flammability or explosive limits: Not determined

Vapor Pressure: 3.5 hPa (3 mm Hg) at 20 °C (68 °F)

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

Ignition temperature: 215 °C (419 °F)

Decomposition temperature: Not determined

Viscosity: Not determined

Explosive properties: Product does not present an explosion hazard

Organic solvents: 0.0 %

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/ conditions to be avoided: 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

LD/LC50 values that are relevant for classification:

2426-08-6 Butyl glycidyl ether

Oral: LD50 2050 mg/kg (rat)

Dermal LD50 2520 mg/kg (rabbit)

B. Irritant effect: Irritant to skin and mucous membranes.

C. Eye irritation: Irritating effect.

D. Sensitization: Sensitization possible through skin contact.

E. Germ cell mutagenicity: No further relevant information available.

F. Carcinogenicity:

IARC (International Agency for Research on Cancer): None of the ingredients is listed.

NTP (National Toxicological Program): None of the ingredients is listed.

OSHA-Ca (Occupational Safety Health Administration): None of the ingredients is 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

Ecotoxicological effects:

Toxic for fish.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms.

- 12.2 Persistence and degradability: No further relevant information available.
12.3 Bio-accumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
12.6 Other adverse effects: 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.

Uncleaned Packagings: Disposal must be made according to official regulations.

Section 14: Transport Information

DOT:

UN Number: UN3082
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.
Hazard Class: 9
Label: 9
Packing Group: III
Emergency Response Guide Number: 171

IATA, IMDG:

UN Number: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))

Class: 9 Miscellaneous dangerous substances and articles
Label: 9
Packing Group: III



Environmental hazards: Product contains environmentally hazardous substances: reaction Product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Marine pollutant: Yes



Special marking:

Special precautions for user: Warning: Miscellaneous dangerous substances and articles
Danger code (Kemler): 90
EMS Number: F-A,S-F

Transport / Additional Information:

ADR (The European Agreement concerning the International Carriage of Dangerous Goods by Road):
Excepted quantities (EQ):

Code: E1
Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 m.

IMDG (International Maritime Code for Dangerous Goods)

Limited quantities (LQ): 5 L

Excepted quantities (EQ): Code E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Section 15: Regulatory Information

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

US Federal Regulations:

TSCA (Toxic Substances Control Act): All ingredients are listed.

SARA 313 (Specific toxic chemical listings): None of the ingredients is listed

SARA 335 (Extremely hazardous substances): None of the ingredients is listed

California Prop. 65:

Chemicals known to cause cancer: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.

Chemicals known to cause developmental toxicity: None of the ingredients is listed.

Carcinogenic categories:

EPA (Environmental Protection Agency): None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH): None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients is

listed.

U.S. State Right-to-Know Regulations:

CAS # 2426-08-6 is listed by the Massachusetts, Pennsylvania, and New Jersey Right-to-Know

Regulations.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

Date of Preparation: 31 May 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:

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