

SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: September 14, 2016

02661-AB Quetol™ 651 Monomer

Component of 02662-AB SPI-Chem™ Quetol™ 651 NSA Resin Kit

Section 1.1: Identification

Chemical Name/Synonyms Ethylene Glycol Diglycidyl Ether; Quetol 651 Resin

Product or Trade Name Quetol 651 Monomer

CAS #'s 2224-15-9

Chemical Formula..... C₈H₁₄O₄

Section 1.2: Relevant Uses/Restrictions

Laboratory chemical, resin monomer used for embedding

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 toxicity (Category 4)(inhalation)

Acute toxicity (Category 4)(skin contact)

Acute toxicity (Category 4)(if swallowed)

Eye irritation (Category 2B)

2.2 Label elements

Pictogram



Signal Word: Warning

Hazard statements:

- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H332: Harmful if inhaled.
- H320: Causes eye irritation.

Precautionary statements:

- P260: Do not breathe dust/fume/gas/mist/vapors/spray.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- 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.
- P305+351+338: P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P304+340+330: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth.
- P337+313: If eye irritation persists get medical advice/attention.
- P302+350: IF ON SKIN: Gently wash with soap and water.
- P361: Remove/Take off immediately all contaminated clothing.
- P403+235: 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:

- Results of PBT and vPvB assessment
 - PBT: Not applicable
 - vPvB: Not applicable

Hazardous Material Information System USA

- Health 1
- Fire Hazard 1
- Reactivity 0
- Personal Protection

NFPA Rating (estimated)

- Health 1
- Flammability..... 1
- Reactivity 0

Section 3: Composition

3.1 Substances:

Ethylene Glycol Diglycidyl Ether CAS# 2224-15-9 EC# 218-746-2

Section 4: First Aid Measures

4.1 Description of first aid measures:

After Inhalation: Supply fresh air; consult doctor in case of complaints.

After Skin Contact: Generally the product does not irritate the skin.

After Eye Contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After 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: Use fire-fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture: No further relevant information available.

Hazardous combustion products: No further relevant information available.

5.3 Advice for firefighters

Special protective equipment and precautions for firefighters: No special measures required.

Section 6: Accidental Release Measures

6.1 Personal precautions: Not required.

6.2 Environmental precautions: Dilute with water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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:
No special measures required.

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.

7.3 Specific end uses:

Resin monomer used for embedding.

This item 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: Not required.

Biological limit values: No information available.

8.2 Exposure controls:

General protective and hygienic 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.

Avoid contact with the eyes.

Avoid contact with the 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:

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 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.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Light yellow liquid

Odor: Characteristic

Odor threshold: Not determined

pH: Not determined

Melting point/Freezing point: Undetermined
Boiling point/Boiling point range: Undetermined
Flash Point: 130 °C (266 °F)
Evaporation rate: Not determined
Flammability (solid, gas): Not flammable
Upper/lower flammability or explosive limits: Not determined
Vapor Pressure: Not determined
Vapor density: Not determined
Relative density: Not determined
Solubility in/ Miscibility with water: Fully miscible
Partition coefficient (n-octanol/water): Not determined
auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: Not determined
Explosive properties: Not determined
Oxidizing Properties: Not determined
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: Harmful if swallowed.

- b. skin corrosion/irritation: Harmful in contact with the skin.
- c. serious eye damage/irritation: Causes eye irritation
- d. respiratory or skin sensitization: No sensitizing effects known.
- e. germ cell mutagenicity: No relevant information available.
- f. carcinogenicity: Not listed by the IARC, NTP, Or OSHA-Ca as a carcinogenic material.
- g. reproductive toxicity: No relevant information available.
- h. STOT-single exposure: No relevant information available.
- i. STOT-repeated exposure: No relevant information available.
- j. aspiration hazard: No relevant information available.

Section 12: Ecological Information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

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.

Additional ecological information: Not known to be hazardous to water.

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:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

Section 14: Transport Information

This substance is considered non-hazardous for transport.

14.1 UN number: None

14.2 UN proper shipping name: Not applicable

- 14.3 Transport hazard class(es): Not applicable
- 14.4 Packing Group: Not applicable
- 14.5 Environmental hazards: Not applicable
- 14.6 Special precautions for user: None known

Section 15: Regulatory Information

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

TSCA: Substance is listed.

SARA Section 313: Substance is not listed.

SARA Section 355: Substance is not listed.

California Proposition 65: Substance is not listed.

Carcinogenic categories:

EPA: Substance is not listed.

ACGIH TLV: Substance is not listed.

NIOSH-Ca: Substance is not listed.

15.2 Chemical Safety Assessment

Chemical Safety Assessment: No further relevant information available.

Date of Preparation: August 14, 2016.

SDS formatted as to GHS system.

Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

Section 16: Other Information

Disclaimer of Liability:

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