Printing date 11/22/2017 Reviewed on 11/22/2017

1 Identification

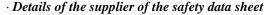
· Product identifier

· Trade name: Epoxy Injection Resin

· Article number: 294007081

• CAS Number: 25068-38-6 • NLP Number: 500-033-5

• *Index number:* 603-074-00-8



· Manufacturer/Supplier:

QubicaAMF Worldwide, LLC 8100 AMF Drive Mechanicsville, VA 23111, USA

711 20111, 0511

General Telephone 804-730-4000; 800-342-5263

- · Information department: Product safety department.
- · Emergency telephone number:

ChemTel 24-hour Emergency Phone Numbers

United States, Canada, Puerto Rico, U.S. Virgin Islands: 1-800-255-3924, Australia: 1-300-954-583, Brazil: 0-800-591-6042, China: 400-120-0751, India: 000-800-100-4086, Mexico: 01-800-099-0731, All other countries (collect calls accepted): +1-813-248-0585

2 Hazard(s) identification

· Classification of the substance or mixture



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

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IF ON SKIN: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin

(number average molecular weight \leq 700)

- · Identification number(s)
- · NLP Number: 500-033-5
- · Index number: 603-074-00-8

4 First-aid measures

- · Description of first aid measures
- · After 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.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

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

· After swallowing:

Seek immediate medical advice.

A person vomiting while lying on their back should be turned onto their side.

DO NOT attempt to give anything by mouth to an unconscious person.

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(Contd. of page 2)

- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Keep people at a distance and stay upwind.

· Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

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

· Methods and material for containment and cleaning up:

Send for recovery or disposal in suitable receptacles.

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

Ensure adequate ventilation.

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Store at ambient temperature 25 C.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Stoor indoors.

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

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- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · 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 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.

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.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid

Color: According to product specification

· Odor: Mild

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Trade name: Epoxy Injection Resin

	(Cont	td. of pag
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	> 260 °C (> 500 °F)	
Flash point:	249 °C (480 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wat	ter): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Organic solvents:	0.0 %	
Solids content:	100.0 %	
Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Avoid elevated temperatures.

· Possibility of hazardous reactions

Reacts with amines.

Reacts with catalysts, oxidizing agents and strong alkali.

Hazardous polymerization may occur if mixed with amines in large masses and/or with heat.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Strong acids, strong bases, strong oxidizers, amines, and mercaptans.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

(Contd. on page 6)

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Unknown hydrocarbons.

(Contd. of page 5)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eve: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

13463-67-7 titanium dioxide wetted form, non-particulate

2B

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Assessment by list): 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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

(Contd. on page 7)

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Trade name: Epoxy Injection Resin

(Contd. of page 6)

- · Uncleaned packagings:
- · Recommendation:

Disposal must be made according to official regulations.

Dispose of in accordance to all local, state, and/or national regislation.

UN-Number	
DOT	Not Applicable
ADR, IMDG, IATA	3082
UN proper shipping name	
DOT	Not Applicable
ADR IMDG, IATA	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy res (number average molecular weight ≤ 700)) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy res (number average molecular weight ≤ 700))
Transport hazard class(es)	
DOT	
Class	Not Applicable
•	
Class Label	9 Miscellaneous dangerous substances and articles 9
Label Packing group	9
Label Packing group DOT	9 Not Applicable
Label Packing group	9
Label Packing group DOT ADR, IMDG, IATA Environmental hazards:	Not Applicable III Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Label Packing group DOT ADR, IMDG, IATA	Not Applicable III Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Yes
Label Packing group DOT ADR, IMDG, IATA Environmental hazards: Marine pollutant:	Not Applicable III Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Label Packing group DOT ADR, IMDG, IATA Environmental hazards:	Not Applicable III Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Yes Symbol (fish and tree)
Label Packing group DOT ADR, IMDG, IATA Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA): Special precautions for user	Not Applicable III Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Yes Symbol (fish and tree) Symbol (fish and tree)
Label Packing group DOT ADR, IMDG, IATA Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA):	Not Applicable III Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Yes Symbol (fish and tree) Symbol (fish and tree)

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· Transport/Additional information:

 $\cdot DOT$

· Remarks: Not regulated.

· UN "Model Regulation": UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S., 9, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · California Proposition 65
- · Chemicals known to cause cancer:

13463-67-7 titanium dioxide wetted form, non-particulate

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

13463-67-7 titanium dioxide wetted form, non-particulate

· NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7 titanium dioxide wetted form, non-particulate

· Chinese Chemical Inventory of Existing Chemical Substances

Substance is listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

(Contd. on page 9)

Printing date 11/22/2017 Reviewed on 11/22/2017

Trade name: Epoxy Injection Resin

(Contd. of page 8)

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

IF ON SKIN: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Health and safety information presented on this form is generally applicable for recomended usage of this product. This information was compiled from current, reliable sources and is believed to be correct. As data and/or regulations change and conditions of use and handling are beyond our control, no warranty, express, or implied, is made as to completeness or continuing accuracy of this information.

- · Department issuing SDS: Product safety department.
- · Date of preparation / last revision 11/22/2017 / -
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation - Category 1