

Printing date 08/16/2017

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1 Identification Product identifier

Trade name: <u>SEC1222 A</u> Application of the substance / the mixture Epoxy Resin

Details of the supplier of the safety data sheet Manufacturer/Supplier:

- ResinLab, LLC N109 W13300 Ellsworth Drive Germantown, WI 53022 1-877-259-1669

- Www.resinlab.com Information Department: Product Safety Department: msds@resinlab.com Emergency Telephone Number: North America Chemtrec: 1-800-424-9300 (24 hours) International Chemtrec: 01-703-527-3887 (24 hours)

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.
- Muta. 2 H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer. Carc. 2

· Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms



· Signal word Warning

- Hazard-determining components of labeling: Bisphenol-A-(epichlorohydrin) epoxy resin Butylglycidylether
- Silvei

Hazard statements

- Hazard Statements H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer.

- H351 Suspected of causing cancer. Precautionary statements Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. If on SKIN: Wash with plenty of water. If exposed or concerned: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.

- Wash contaminated clothing before reuse.
- Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

- NFPA System NFPA ratings (scale 0 4)
 - Health = 2

Fire = 1 Reactivity = 00

NFPA special hazards (water reactivity and oxidizing property): None

- · HMIS System · HMIS-ratings (scale 0 4) HEALTH *2 Health = *2 FIRE 1 Fire = 1
 - Reactivity = 0**REACTIVITY** 0

Other hazards • Results of PBT and vPvB assessment • PBT: Not applicable.





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· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization:	Mixtures	
· Dangerous components:		
CAS: 7440-22-4	Silver	70-80%
EINECS: 231-131-3	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Eye Irrit. 2A, H319	
CAS: 25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	10-20%
NLP: 500-033-5 Index number: 603-074-00-8	Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	
CAS: 2426-08-6	Butylglycidylether	2.5-5%
EINECS: 219-3/6-4	Flam. Liq. 3, H226 Muta. 2, H341; Carc. 2, H351	
RTECS: TX 4200000	Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317	
	Aquatic Chronic 3, H412	
Additional information.		

Additional information: If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

4 First-aid measures

Description of first aid measures

General information: Keep warm, position comfortably and cover well.

After inhalation:

Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing. Supply fresh air and if symptoms occur call for a doctor. In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly. Remove all contaminated clothing and wash before reuse. If skin rash or irritation occurs, seek medical advice. After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Remove contact lenses if present and easy to do so; continue rinsing.

Seek medical advice.

After swallowing: If victim is unconscious; never give anything by mouth. If victim is conscious rinse mouth and give small amounts of water. Get medical attention if you feel unwell. Information for doctor: Most important comptons and offects, both couts and dolo

Most important symptoms and effects, both acute and delayed No further relevant information available.
 Indication of any immediate medical attention and special treatment needed Skin, Eye, and Reproductive system

5 Fire-fighting measures

• Extinguishing media • Suitable extinguishing agents: Alcohol resistant foam

- Carbon dioxide
- Fire-extinguishing powder water fog
- Water spray

Special hazards arising from the substance or mixture In case of fire, the following can be released: Phenolic compounds

Carbon dioxide (CO₂) and Carbon monoxide (CO) Silver (Ag) dust Advice for firefighters

Protective equipment: If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156). As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

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 Wear protective clothing.
 Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.
 Environmental precautions:
 Do not allow to enter sewers/ surface or ground water.
 Inform respective authorities in case of seepage into water course or sewage system.
 Methods and material for containment and cleaning up:
 For large spills: provide diking or containment to minimize spreading. If possible pump and store material in appropriate container.
 For small spills: Ventilate and wash area. Collect spills and absorbant material in appropriate container.
 Allow molten product to cool.
 Non sparking tools should be used.

Non sparking tools should be used.





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Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

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7 Handling and storage

Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.

Keep away from incompatible material(s). Avoid any release into the environment.

Avoid any release into the environment. For industrial or professional use only Do not breathe dust/fumes/mist/vapor/spray. Avoid contact with eyes, skin and clothing. Keep away from heat,sparks, flames and ignition sources. Observe all the personal protection requirements in Section 8.

Conditions for safe storage, including any incompatibilities

Storage: Requirements to be met by storerooms and receptacles: Provide ventilation for receptacles.

Keep stored in accordance with local, regional, national, and international regulations.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

2426-08-6 Butylglycidylether PEL Long-term value: 270 mg/m³, 50 ppm

Ceiling limit value: 30 mg/m³, 5.6 ppm *15-min REL

Long-term value: 16 mg/m³, 3 ppm

Skin; DSEN

· Additional Occupational Exposure Limit Values for possible hazards during processing: None.

Exposure controls

TLV

Exposure controls
If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below
recommended exposure limits.
If exposure limits have not been established, maintain airborne levels to an acceptable level.
• Personal protective equipment:
• General protective and hygienic measures:
Be sure to clean skin thoroughly after work and before breaks.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Avoid contact with the eves and skin

Avoid contact with the eyes and skin.

Personal Protective Equipment (PPE)

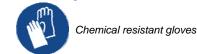
Breathing equipment: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended

Sufficient ventiliation in pattern and volume organic reprint or for exposure limits. Use a NIOSH approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves



Eve protection:



Safety Glasses with side shields

 Body protection: Appropriate chemical resistant clothing. Limitation and supervision of exposure into the environment The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138. US

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9 Physical and chemical propertie	es
Information on basic physical and chen General Information Appearance:	
Form: Color:	Pasty Silver-colored
· Odor:	Mild epoxy odor
· Odor threshold:	Not determined.
· pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. Undetermined.
· Flash point:	>93°C (°F)
 Flammability (solid, gaseous): 	Not applicable.
 Ignition temperature: 	Not determined.
 Decomposition temperature: 	Not determined.
· Auto igniting:	Product is not selfigniting.
 Danger of explosion: 	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	Not determined. Not determined.
 Vapor pressure: Vapor Density: 	Not determined. not determined
 Density at 20°C (68 °F): Relative density Vapor density Evaporation rate 	3.3 g/cm³ (lbs/gal) Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	r): Not determined.
Viscosity: Dynamic: Kinematic:	Not available. Not available.

10 Stability and reactivity

Reactivity Not a regulated physical hazard under GHS.

Hazardous Reactivity and Chemical Stability May polymerize when heated.
 Thermal decomposition / conditions to be avoided: To avoid thermal decomposition do not overheat. No decomposition if used and stored according to specifications.
 Possibility of hazardous reactions In contact with incompatible materials.
 Conditions to avoid Keep away from heat, sparks, flame and any other ignition sources.
 Incompatible materials: Oxidizing agents Mercaptas

Mercaptans

Acids

Amines

Bases (Alkalis) Hazardous decomposition products: Possible in traces.

Refer to section 5.

11 Toxicological information

· Information on toxicological effects Acute toxicity:

LD/LC50 values that are relevant for classification: Not a classified acute oral hazard. Specific symptoms in biological assay: Not a classified acute dermal hazard. Primary irritant effect:

 • on the skin: Irritant to skin and mucous membranes.
 • on the eye: Irritating effect.
 • Sensitization: Sensitization possible through skin contact.
 • Additional toxicological information:
 The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

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> · OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Behavior in environmental systems:
- Behavior in environmental systems:

 Bioaccumulative potential No data available.
 Mobility in soil No further relevant information available.

 Additional ecological information: The product is non-rapid degradable, and low or not highly bioaccumulative.
 General notes:

 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.

 Results of PBT and vPvB assessment

 PBT: None of the ingredients is listed.
 vPvB: None of the ingredients is listed.
- vPvB: None of the ingredients is listed.
 Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· RCRA Waste:

7440-22-4 Silver

2426-08-6 Butylglycidylether

Recommendation:

Must be specially treated adhering to official regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

• Uncleaned packagings: • Recommendation: Dispose of according to your local waste regulations.

UN-Number · DOT, IMDG, IATA	UN3082
UN proper shipping name DOT	Environmentally hazardous substances, liquid, n.o.s. (Epo Resin)
·IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUI
·IATA	ÈŇŸÍRONMENTALLY HAZARDOUS SUBSTANCE, LIQUI N.O.S. (Epoxy Resin), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUI N.O.S. (Epoxy Resin)
Transport hazard class(es)	
DOT, IMDG, IATA	
· Class · Label	9 Miscellaneous dangerous substances and articles 9
Packing group • DOT, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F A
Transport in bulk according to Annex II of MAI IBC Code	RPOL73/78 and the Not applicable.
Transport/Additional information:	
DOT Quantity limitations	On passenger aircraft/rail: No limit On cargo aircraft only: No limit Special marking with the symbol (fish and tree).
· Remarks:	Special marking with the symbol (fish and tree).
· IMDG · Limited quantities (LQ)	5L

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D011 70-80%

D001 2.5-5%

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UN "Model Regulation":

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· Excepted quantities (EQ)

Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (EPOXY RESIN), 9, III

15 Regulatory information · Safety, health and environmental regulations/legislation specific for the substance or mixture · SARA Section 355 (extremely hazardous substances): None of the ingredients is listed. SARA Section 313 (Specific toxic chemical listings): 7440-22-4 Silver 70-80% SARA Section 311/312 (Hazardous Chemical Inventory Reporting) 25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin A, C 10-20% A, C, F 2.5-5% 2426-08-6 Butylglycidylether Hazard Abbreviations for SARA 311/312 A - Acute Health Hazard C - Chronic Health Hazard F - Fire Hazard R - Reactive Hazard S - Sudden Release of Pressure Hazard TSCA (Toxic Substances Control Act): All ingredients are listed. Proposition 65 Chemicals known to cause cancer: 106-89-8 1-chloro-2,3-epoxypropane · Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed. · Chemicals known to cause reproductive toxicity for males: 106-89-8 1-chloro-2,3-epoxypropane · Chemicals known to cause developmental toxicity: None of the ingredients is listed. Carcinogenic categories · EPA (Environmental Protection Agency) 7440-22-4 Silver D 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. International Regulation Lists · Chinese Chemical Inventory of Existing Chemical Substances: All ingredients are listed. GHS label elements GHS label elements National regulations: Japanese Existing and New Chemical Substance List: All ingredients are listed. Korean Existing Chemical Inventory: All ingredients are listed. · European Pre-registered substances: All ingredients are listed. · EINECS List: 7440-22-4 Silver 2426-08-6 Butylglycidylether · ELINCS List: None of the ingredients is listed. · REACh - Substances of Very High Concern (SVHC) List: None of the ingredients is listed. Restriction of Hazardous Substances Directive (RoHS) list: None of the inaredients is listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department Issuing (M)SDS: Product Development Department

Contact: msds@rešinlab.com

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 * Data compared to the previous version altered.

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