

SAFETY DATA SHEET

Version: 4.0
Date of Issue: 04 May 2017
Date of First Issue: 17 June 2015

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ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 1: IDENTIFICATION

Product identifier used on the label	EpoxyLite 813 Part A	
Other means of identification	Not applicable	
Recommended use of the chemical and restrictions on use		
Recommended use	PC14 Metal surface treatment products, including galvanic and electroplating products.	
Restrictions on use	Anything other than the above.	
Details of the supplier of the safety data sheet		
Supplier	VISHAY MEASUREMENTS GROUP, INC.	
Address of Supplier	Post Office Box 27777 Raleigh, NC 27611 USA	
Telephone	+1 919-365-3800	
Fax	+1 919-365-3945	
E-Mail (competent person)	mm.us@vishaypg.com	
Emergency telephone number	1-800-424-9300	CHEMTREC (24 hours)

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200

Physical hazards	Not classified
Health hazards	Skin Corrosion/Irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2 Specific target organ toxicity — repeated exposure, Category 1 Carcinogen, Category 1A
Environmental hazards	Hazardous to the aquatic environment, Chronic, Category 2

Hazard Symbol



Signal Word(s)

DANGER

Hazard Statement(s)

Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Causes damage to organs (Lungs) through prolonged or repeated exposure.
May cause cancer.
Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe vapour.
Wash hands and exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice/attention.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists, get medical advice/attention.
Get medical advice/attention if you feel unwell.
IF exposed or concerned: Get medical advice/attention.

Other hazards

Susceptible to polymerisation initiated by prolonged heating or the presence of catalyst. Bulk: May undergo autopolymerisation.

Percent of the mixture consists of ingredient(s) of unknown acute toxicity: 0%

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable

Mixtures Substances in preparations / mixtures

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard classification
Phenol, polymer with formaldehyde, glycidyl ether	65 - 75	28064-14-4	608-164-0	Skin Corrosion/Irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2 Hazardous to the aquatic environment, Chronic, Category 2
Crystalline silica	10 - 20	14808-60-7	238-878-4	Carcinogen, Category 1A Specific target organ toxicity — repeated exposure, Category 1 Specific target organ toxicity — single exposure, Category 3
Magnesium silicate	10 - 20	14807-96-6	238-877-9	Not classified
Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)	< 5	25068-38-6	500-033-5	Skin Corrosion/Irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2 Hazardous to the aquatic environment, Chronic, Category 2

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Do not breathe vapour. Avoid all contact. Contaminated clothing should be laundered before reuse.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical advice/attention if you feel unwell. If exposed or concerned: Get medical attention/advice.

Skin Contact

IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation or rash occurs: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation develops or persists.

Ingestion

Rinse mouth. Do not induce vomiting. Do not give anything by mouth to an unconscious person. If exposed or concerned: Get medical attention/advice.

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Most important symptoms and effects, both acute and delayed

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Causes damage to organs (Lungs) through prolonged or repeated exposure. May cause cancer.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing Media

Do not use water jet. Direct water jet may spread the fire.

Special hazards arising from the substance or mixture

May decompose in a fire giving off toxic fumes. Carbon monoxide, carbon dioxide and phenolic. Susceptible to polymerisation initiated by prolonged heating or the presence of catalyst.

Special protective equipment and precautions for fire fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8. Avoid breathing vapours.

Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

Methods and material for containment and cleaning up

Absorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin, eyes or clothing. Do not breathe vapour. Ensure adequate ventilation. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Susceptible to polymerisation initiated by prolonged heating or the presence of catalyst. Bulk: May undergo autopolymerisation.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

Keep away from: Acids, strong bases, Strong Oxidizing agents and halogenated compounds.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Quartz (SiO ₂) (crystalline silica)	14808-60-7	-	0.05	-	-	NIOSH
		-	30	-	-	OSHA Total Dust
		-	10	-	-	Respirable Dust
Talc (containing no asbestos and less than 1% quartz)	14807-96-6	-	0.025	-	-	ACGIH, A2
		-	2	-	-	NIOSH Respirable Dust
		20 mppcf ^a	-	-	-	OSHA
		-	2	-	-	ACGIH, A4

Note: OSHA PELs 1910.1000 TABLE Z-3 / NIOSH RELs / ACGIH TLVs

A4: Not Classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of the lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories.

A2: Suspected Human Carcinogen: Human data are accepted as adequate in quality but are conflicting or insufficient to classify the agent as a confirmed human carcinogen; OR, the agent is carcinogenic in experimental animals at dose(s), by route(s) of exposure, at site(s), of histological type(s), or by mechanism(s) considered relevant to worker exposure. The A2 is primarily when there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans.

Mppcf^a: Millions of particles per cubic foot of air

The other components listed in Section 3 do not have occupational exposure limits.

Biological Exposure Indices

Not established

Appropriate engineering controls

Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit.

Individual protection measures, such as personal protective equipment (PPE)

General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.

Eye/face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. The gloves type used must be chosen based on the work activity and duration as well as concentration/quantity of material being handled.

Body protection: Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection



In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment. Unlikely to present a dust hazard under normal handling conditions. Wear suitable respiratory protective equipment if processing involves working in areas where dusts or vapours are likely to be evolved.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	Not available.
Odor Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	Not established.
Initial boiling point and boiling range	Not established.
Flash Point	>94°C (Estimated)
Evaporation rate (Butyl acetate = 1)	Not applicable.
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not established.
Relative density	1.41 (H ₂ O = 1) @ 25°C
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	>22 mm ² /s @ 40°C

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Susceptible to polymerisation initiated by prolonged heating or the presence of catalyst. Bulk: May undergo autopolymerisation.
Conditions to avoid	Keep away from heat, sources of ignition and direct sunlight.
Incompatible materials	Keep away from: Acids, strong bases, Strong Oxidizing agents and halogenated compounds.
Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide and phenolic.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity - Ingestion	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20.0 mg/l.
Acute toxicity - Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Skin corrosion/irritation	Skin Corrosion/Irritation, Category 2: Causes skin irritation.
Serious eye damage/irritation	Eye Irritation, Category 2: Causes serious eye irritation.
Respiratory or skin sensitization	Skin Sensitisation, Category 1: May cause an allergic skin reaction.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Carcinogen, Category 1A: May cause cancer.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
STOT - single exposure	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Specific target organ toxicity — repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure: Lungs.
Aspiration hazard	Based upon the available data, the classification criteria are not met.

Information on likely routes of exposure

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Inhalation	Possible – accidental exposure
Ingestion	Unlikely – accidental exposure
Skin Contact	Possible – accidental exposure
Eye Contact	Unlikely – accidental exposure
Early onset symptoms related to exposure	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
Delayed health effects from exposure	Causes damage to organs (Lungs) through prolonged or repeated exposure. May cause cancer.
Other information	
NTP Report on Carcinogens	Quartz (Silica, respirable Crystalline) - Group K: Known To Be Human Carcinogens
IARC Monographs	Talc - Group 3: Not classifiable as to its carcinogenicity to humans. Quartz (Silica, respirable Crystalline) - Group 1: Carcinogenic to humans
OSHA Designated Carcinogen	Not listed.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic Chronic 2: Toxic to aquatic life with long lasting effects. Estimated Mixture LC50 > 1 ≤ 10 mg/l (Fish)
Persistence and degradability	No data for the mixture as a whole.
Bioaccumulative potential	No data for the mixture as a whole.
Mobility in soil	The product is predicted to have low mobility in soil. The product is essentially insoluble in water.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Do not release undiluted and unneutralised to the sewer. Dispose of this material and its container as hazardous waste. Send after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation.
Additional Information	Dispose of contents in accordance with local, state or national legislation. Containers of this material may be hazardous when empty since they retain product residue.

SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMDG	IATA
UN number	UN 3082	UN 3082	UN 3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Phenol, polymer with formaldehyde, glycidyl ether and Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Phenol, polymer with formaldehyde, glycidyl ether and Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Phenol, polymer with formaldehyde, glycidyl ether and Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant	Environmentally hazardous substance
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			
Special precautions for user	See Section: 2		

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SECTION 15: REGULATORY INFORMATION

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

US Federal Regulations

TSCA (Toxic Substance Control Act)	Phenol, polymer with formaldehyde, glycidyl ether: Exempt from reporting under CDR Talc - Subject to 25,000 lb reporting threshold Quartz (Silica, respirable Crystalline) - Subject to 25,000 lb reporting threshold Reaction product: bisphenol-A-(epichlorhydrin): Exempt from reporting under CDR
EPCRA/SARA Section 302 Extremely Hazardous Substances	Not listed.
EPCRA Section 313 Toxics Release Inventory (TRI) Program	Not listed.
NIOSH Occupational Carcinogen List	Quartz (Silica, respirable Crystalline) - Listed
OSHA List of highly hazardous chemicals, toxics and reactives	Not listed.
NTP Report on Carcinogens (RoC) List	Quartz (Silica, respirable Crystalline) - Group K: Known To Be Human Carcinogens
Poison Prevention Packaging Act	Not listed.

US State Regulations

California State, Proposition 65 List	Quartz (Silica, respirable Crystalline) - Listed
California State, Safer Consumer Products Regulations	Talc - Candidate Chemicals List Quartz (Silica, respirable Crystalline) - Candidate Chemicals List
Maine State, Toxic Chemicals in Children's Products Act	Quartz (Silica, respirable Crystalline) - COC list. CHC list
New Jersey State Worker and Community RTK Act	Talc - RTKHSL. SHHSL Quartz (Silica, respirable Crystalline) - RTKHSL. SHHSL
Pennsylvania State, Worker and Community RTK Act	Talc - Hazardous Substance List Quartz (Silica, respirable Crystalline) - Hazardous Substance List
Rhode Island State, Hazardous Substances RTK Act	Talc - Hazardous Substance List Quartz (Silica, respirable Crystalline) - Hazardous Substance List

Non-Regional

IARC Monographs, List of Classifications	Talc - Group 3: Not classifiable as to its carcinogenicity to humans. Quartz (Silica, respirable Crystalline) - Group 1: Carcinogenic to humans
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SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated substance / mixture classification. New SDS Regulation compliant with HazCom 2012 format, all sections have been updated to include new information. Please review SDS with care.

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References:

Existing Safety Data Sheet (SDS), EU Data: Harmonised Classification(s) for Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) (CAS# 25068-38-6), Existing ECHA registration(s) for Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) (CAS# 25068-38-6), and the Classification and Labelling Inventory for Phenol, polymer with formaldehyde, glycidyl ether (CAS# 28064-14-4), Crystalline silica (CAS# 14808-60-7) and Magnesium silicate talc (CAS# 14807-96-6).

GHS Classification of the substance or mixture	Classification Procedure
Skin Corrosion/Irritation, Category 2	Threshold Calculation
Skin Sensitisation, Category 1	Threshold Calculation
Eye Irritation, Category 2	Threshold Calculation
Specific target organ toxicity — repeated exposure, Category 1	Threshold Calculation
Carcinogen, Category 1A	Threshold Calculation
Hazardous to the aquatic environment, Chronic, Category 2	Summation Calculation

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LEGEND

ACGIH: American Conference of Governmental Industrial Hygienists
BEI: Biological Exposure Indices (ACGIH)
IARC: International Agency for Research on Cancer
Irr: Irritation
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: The Occupational Safety & Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PEL: Permissible exposure limit

REL: Recommended exposure limit
SCL: Specific Concentration Limit
Skin^o: Risk of overexposure via dermal contact
STEL: Short Term Exposure Limit
TLV: Threshold Limit value
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
URT: Upper respiratory tract
vPvB: very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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