




109BF A - FLEXIBLE EPOXY A



SECTION 1: IDENTIFICATION

- 1.1 Product identifier:** 109BF A - FLEXIBLE EPOXY A
Other means of identification:
Non-applicable
- 1.2 Recommended use of the chemical and restrictions on use:**
Relevant uses (Consumer use): Base for coatings
Relevant uses (Industrial user): Base for coatings
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Name, U.S. address, and U.S. telephone number of the chemical manufacturer, importer, or other responsible party:**
EPICOAT S.A. DE C.V.
2176 French Settlement rd Dallas, Texas 75212
Phone: 682 414 1623 Ein number 41 3045549
erod@theepicoats.com
<https://theepicoats.com/>
- 1.4 Emergency phone number:**

SECTION 2: HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
29 CFR 1910.1200:
Classification of the chemical in accordance with paragraph (d)(1)(i) of §1910.1200
Eye Irrit. 2A: Eye irritation, Category 2A, H319
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1: Sensitisation, skin, Category 1, H317
- 2.2 Label elements:**
29 CFR 1910.1200:
Warning

Hazard statements:
Eye Irrit. 2A: H319 - Causes serious eye irritation.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Precautionary statements:
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P261: Avoid breathing vapours
P264: Wash thoroughly after use.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
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.
P501: Dispose of the contents/containers according to the local, state and federal regulations.
Substances that contribute to the classification
Diglycidyl bisphenol A resin; oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Additional labeling:



SECTION 2: HAZARD(S) IDENTIFICATION (continued)

Federal Hazardous Substances Act (FHSA) >> Irritant (Eyes)

May irritate eyes. Do not get in eyes. Keep out of reach of children.

FIRST AID TREATMENT

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

Contains : Diglycidyl bisphenol A resin; oxirane, mono[(C12-14-alkyloxy)methyl] derivs..

Federal Hazardous Substances Act (FHSA) >> Strong sensitizer (dermal)

May cause an allergic skin reaction. Wear gloves. Keep out of reach of children.

FIRST AID TREATMENT

If on skin, rinse well with water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Contains : Diglycidyl bisphenol A resin; oxirane, mono[(C12-14-alkyloxy)methyl] derivs..

2.3 Hazards not otherwise classified (HNOC):

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Mixture composed of additives and epoxy resin in solvents

Components:

Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

| Identification | Chemical name/Classification | Concentration |
|-----------------|---|---------------|
| CAS: 25085-99-8 | Diglycidyl bisphenol A resin Aquatic Acute 2: H401; Aquatic Chronic 2: H411; Comb. Dust: CD; Eye Irrit. 2A: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | 75 - <100% |
| CAS: 68609-97-2 | oxirane, mono[(C12-14-alkyloxy)methyl] derivs. Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | 10 - <25% |
| CAS: 111-76-2 | 2-butoxyethanol Acute Tox. 3: H331; Acute Tox. 4: H302; Eye Irrit. 2A: H319; Flam. Liq. 4: H227; Skin Irrit. 2: H315 - Danger | <1% |

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.



SECTION 4: FIRST-AID MEASURES (continued)

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

It is recommended to avoid environmental spillage of both the product and its container.

6.3 Methods and materials for containment and cleaning up:

For accidental releases in excess of reportable quantities (RQ) (Table 302.4), refer to 40 CFR 302 for detailed instructions concerning reporting requirements and notify the National Response Center (800) 424-8802.

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.



SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.: 41 °F

Maximum Temp.: 86 °F

Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

| Identification | Occupational exposure limits | | |
|---|------------------------------|--------|-----------------------|
| | 8-hour TWA PEL | 50 ppm | 240 mg/m ³ |
| 2-butoxyethanol ⁽¹⁾ CAS: 111-76-2 | Ceiling Values - TWA PEL | | |

US. ACGIH Threshold Limit Values (2022):

| Identification | Occupational exposure limits | | |
|---|------------------------------|--------|--|
| | TLV-TWA | 20 ppm | |
| 2-butoxyethanol ⁽¹⁾ CAS: 111-76-2 | TLV-STEL | | |

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

| Identification | Occupational exposure limits | | |
|---|------------------------------|--------|----------------------|
| | PEL | 20 ppm | 97 mg/m ³ |
| 2-butoxyethanol ⁽¹⁾ CAS: 111-76-2 | STEL | | |

NIOSH: Immediately Dangerous To Life or Health (IDLH) Values:

| Identification | Occupational exposure limits | | |
|---|------------------------------|---------|--|
| | TWA | | |
| 2-butoxyethanol ⁽¹⁾ CAS: 111-76-2 | IDLH Value | 700 ppm | |

⁽¹⁾ Skin

Biological limit values:

Biological Exposure Indices (BEIs®) - ACGIH

| Identification | BEIs® | Determinant | Sampling Time |
|----------------------------------|-----------------------|----------------------------------|---------------|
| 2-butoxyethanol CAS: 111-76-2 | 200 mg/g (Creatinine) | Butoxyacetic acid (BAA) in urine | End of shift |

8.2 Appropriate engineering controls:

- CONTINUED ON NEXT PAGE -




SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)


A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection


| Pictogram | PPE | Remarks |
|---|--|--|
|  Mandatory respiratory tract protection | Filter mask for gases and vapours (Filter type: A) | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR) |

C.- Specific protection for the hands

| Pictogram | PPE | Remarks |
|--|--|--|
|  Mandatory hand protection | Chemical protective gloves (Material: PVC, Breakthrough time: > 480 min) | The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. Use gloves in accordance with manufacturer's use limitations and OSHA standard 1910.138 (29CFR) |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection



| Pictogram | PPE | Remarks |
|--|---|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer's use limitations and OSHA standard 1910.133 (29CFR) |

E.- Bodily protection

| Pictogram | PPE | Remarks |
|-----------|----------------------|---|
| | Work clothing | Replace before any evidence of deterioration. |
| | Anti-slip work shoes | Replace before any evidence of deterioration. |

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|--|--|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

40 CFR Part 59 (VOC):

| | |
|-------------------------|-----------------------|
| V.O.C.(weight-percent): | 0.84 % weight |
| V.O.C. at 68 °F: | 9.68 kg/m³ (9.68 g/L) |



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

California Air Resources Board (CARB) - VOC Regulatory:

| | |
|-------------------------|-----------------------------------|
| V.O.C.(weight-percent): | 0.84 % weight |
| V.O.C. at 68 °F: | 9.68 kg/m ³ (9.68 g/L) |

South Coast Air Quality Management District (AQMD) - VOC Regulatory:

| | |
|-------------------------|-----------------------------------|
| V.O.C.(weight-percent): | 0.84 % weight |
| V.O.C. at 68 °F: | 9.68 kg/m ³ (9.68 g/L) |

Ozone Transport Commission (OTC) Rules - VOC Regulatory:

| | |
|-------------------------|-----------------------------------|
| V.O.C.(weight-percent): | 0.84 % weight |
| V.O.C. at 68 °F: | 9.68 kg/m ³ (9.68 g/L) |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|------------------|
| Physical state at 68 °F: | Liquid |
| Appearance: | Fluid |
| Color: | Light yellow |
| Odor: | Soft |
| Odour threshold: | Non-applicable * |

Volatility:

| | |
|--|-----------------------|
| Boiling point at atmospheric pressure: | 307 °F |
| Vapour pressure at 68 °F: | 614 Pa |
| Vapour pressure at 122 °F: | 3461.23 Pa (3.46 kPa) |
| Evaporation rate at 68 °F: | Non-applicable * |

Product description:

| | |
|--|--------------------------|
| Density at 68 °F: | 1151.8 kg/m ³ |
| Relative density at 68 °F: | 1.152 |
| Dynamic viscosity at 68 °F: | Non-applicable * |
| Kinematic viscosity at 68 °F: | Non-applicable * |
| Kinematic viscosity at 104 °F: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 68 °F: | Non-applicable * |
| Partition coefficient n-octanol/water 68 °F: | Non-applicable * |
| Solubility in water at 68 °F: | Non-applicable * |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |

Flammability:

| | |
|----------------------------|---------------------------|
| Flash Point: | Non Flammable (>199.4 °F) |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 460 °F |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |

*Non-applicable due to the nature of the product, not providing information property of its hazards.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Particle characteristics:

Median equivalent diameter: Non-applicable *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties: Non-applicable *

Oxidising properties: Non-applicable *

Corrosive to metals: Non-applicable *

Heat of combustion: Non-applicable *

Aerosols-total percentage (by mass) of flammable components: Non-applicable *

Other safety characteristics:

Surface tension at 68 °F: Non-applicable *

Refraction index: Non-applicable *

*Non-applicable due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|------------|----------------|
| Not applicable | Not applicable | Precaution | Precaution | Not applicable |

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):



SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Causes serious eye irritation.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
IARC: 2-butoxyethanol (3); Stoddard solvent (3); Distillates (petroleum), hydrotreated light (3); Toluene (3); Xylene (3); Ethylbenzene (2B)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|----------------------------------|------------------------|------------|-------|
| 2-butoxyethanol CAS: 111-76-2 | LD50 oral | 1200 mg/kg | Rat |
| | LD50 dermal | | |
| | LC50 inhalation vapour | 3 mg/L | |

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Acute toxicity:



109BF A - FLEXIBLE EPOXY A



SECTION 12: ECOLOGICAL INFORMATION (continued)

| Identification | Concentration | Species | Genus |
|---|--------------------------|---------------------------------|------------|
| Diglycidyl bisphenol A resin CAS: 25085-99-8 | LC50 >1 - 10 mg/L (96 h) | | Fish |
| | EC50 >1 - 10 mg/L (48 h) | | Crustacean |
| | EC50 >1 - 10 mg/L (72 h) | | Algae |
| 2-butoxyethanol CAS: 111-76-2 | LC50 1490 mg/L (96 h) | Lepomis macrochirus | Fish |
| | EC50 1815 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 911 mg/L (72 h) | Pseudokirchneriella subcapitata | Algae |

Chronic toxicity:

| Identification | Concentration | Species | Genus |
|----------------------------------|---------------|---------------|------------|
| 2-butoxyethanol CAS: 111-76-2 | NOEC 100 mg/L | Danio rerio | Fish |
| | NOEC 100 mg/L | Daphnia magna | Crustacean |

12.2 Persistence and degradability:

Substance-specific information:

| Identification | Degradability | Biodegradability | |
|----------------------------------|-------------------------------|------------------|----------|
| 2-butoxyethanol CAS: 111-76-2 | BOD5 0.71 g O ₂ /g | Concentration | 100 mg/L |
| | COD 2.2 g O ₂ /g | Period | 14 days |
| | BOD5/COD 0.32 | % Biodegradable | 96 % |

12.3 Bioaccumulative potential:

Substance-specific information:

| Identification | Bioaccumulation potential | |
|----------------------------------|---------------------------|------|
| 2-butoxyethanol CAS: 111-76-2 | BCF | 3 |
| | Pow Log | 0.83 |
| | Potential | Low |

12.4 Mobility in soil:

| Identification | Absorption/desorption | Volatility | |
|----------------------------------|--------------------------------------|------------|---------------------------------|
| 2-butoxyethanol CAS: 111-76-2 | Koc 8 | Henry | 1.621E-1 PaΣm ³ /mol |
| | Conclusion Very High | Dry soil | Non-applicable |
| | Surface tension 2.729E-2 N/m (77 °F) | Moist soil | Yes |

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Wastes generated by normal household activities (e.g., routine house and yard maintenance) are excluded from the definition of hazardous waste (Title 40 of the Code of Federal Regulations Part 261.4)

Waste management (disposal and evaluation):

Follow RCRA framework and EPA regulation for to ensure that hazardous waste is managed safely and properly.Waste should not be disposed of to drains. Remind, It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristics or listing. See section 6 for further information about Accidental release measures.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Solid Wastes - Part 239 through 282.

State regulatory requirements for generators may be more stringent than those in the federal program. Be sure to check the state's policies.

SECTION 14: TRANSPORT INFORMATION



SECTION 14: TRANSPORT INFORMATION (continued)

Transport of dangerous goods by land:

With regard to 49 CFR on the Transport of Dangerous Goods:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diglycidyl bisphenol A resin)
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group, if applicable:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Under 49 CFR 171.4, Except when transporting aboard a vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars, and aircraft
- 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 42-24:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diglycidyl bisphenol A resin)
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group, if applicable:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**
Special regulations: 335, 969, 274
EmS Codes: F-A, S-F
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Segregation group: Non-applicable
- 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2025:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diglycidyl bisphenol A resin)
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group, if applicable:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Non-applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:



SECTION 15: REGULATORY INFORMATION (continued)

- CALIFORNIA LABOR CODE - The Hazardous Substances List: *2-butoxyethanol (111-76-2)*
 - California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Birth defects or other reproductive harm: Non-applicable
 - California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Cancer: Non-applicable
 - CANADA-Domestic Substances List (DSL): *Diglycidyl bisphenol A resin (25085-99-8)*; *oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)*; *2-butoxyethanol (111-76-2)*
 - CANADA-Non-Domestic Substances List (NDSL): Non-applicable
 - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantities: *2-butoxyethanol (111-76-2)* - 1 lb
 - Hazardous Air Pollutants (Clean Air Act): *2-butoxyethanol (111-76-2)*
 - Massachusetts RTK - Substance List: *2-butoxyethanol (111-76-2)*
 - Minnesota - Hazardous substances ERTK: *2-butoxyethanol (111-76-2)*
 - New Jersey Worker and Community Right-to-Know Act: *2-butoxyethanol (111-76-2)*
 - New York RTK - Substance list: *2-butoxyethanol (111-76-2)*
 - NTP (National Toxicology Program): Non-applicable
 - OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable
 - Pennsylvania Worker and Community Right-to-Know Law: *2-butoxyethanol (111-76-2)*
 - Protective Action Criteria (PAC) with AEGLs, ERPGs, & TEELs: *2-butoxyethanol (111-76-2)*
 - Rhode Island - Hazardous substances RTK: *2-butoxyethanol (111-76-2)*
 - SB-258 Cleaning Product Right to Know Act : *2-butoxyethanol (111-76-2)*
 - The Toxic Substances Control Act (TSCA) : *Diglycidyl bisphenol A resin (25085-99-8)*; *oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)*; *2-butoxyethanol (111-76-2)*
 - Toxic chemical release reporting under EPCRA section 313 (40 CFR Part 372): *2-butoxyethanol (111-76-2)*
- Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information provided in this safety data sheet as a foundation for conducting workplace-specific risk assessments. These assessments will help establish the appropriate risk prevention measures for handling, using, storing, and disposing of this product.

Other legislation:

Take into consideration other applicable federal, state, and local laws and local regulations.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

29 CFR 1910.1200:

Acute Tox. 3: H331 - Toxic if inhaled.

Acute Tox. 4: H302 - Harmful if swallowed.

Aquatic Acute 2: H401 - Toxic to aquatic life.

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.

Comb. Dust: CD - May form combustible dust concentrations in air

Eye Irrit. 2A: H319 - Causes serious eye irritation.

Flam. Liq. 4: H227 - Combustible liquid.

Skin Irrit. 2: H315 - Causes skin irritation.

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

Advice related to training:

According to 29 CFR 1910. 1200, training on chemical hazards is necessary for employees using this product. This training will facilitate their understanding and interpretation of the safety data sheet, as well as the product label.

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Abbreviations and acronyms:



109BF A - FLEXIBLE EPOXY A



SECTION 16: OTHER INFORMATION (continued)

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

Manufacturer Disclaimer: The information contained in this safety data sheet ("SDS") is based on sources, technical knowledge and current legislation. Furthermore, is based on data believed to be accurate; thus, the company does not assume any liability for its accuracy. The information provided herein cannot be considered a guarantee of the properties of this product and the same is simply a description of the security requirements. The use, occupational methodology and/or conditions for users of this product are not within our awareness or control. It is ultimately the responsibility of the user(s) to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information of this SDS only refers to this product, which should not be used for purposes other than those specified. Finally, the manner in which this product is used and whether there is any infringement of patents is the sole responsibility of the user(s).

END OF SAFETY DATA SHEET