

Trade name: R-R820 Epoxy Adhesive Part A

SECTION 1: Identification

Product identifier used on the label:

Product Name: Epoxy Adhesive Part A

Other means of identification:

Product Code Number: Part A

Recommended use of the chemical and restrictions on use:

Recommended use: 2-Part Epoxy Adhesive

Recommended restrictions: Uses other than those described above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Forza Inc

Company Address: 3211 Nebraska Ave., Suite 300
Council Bluffs, IA 51501

Emergency phone number: Chemtrec 1 (800)-424-9300

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

None expected

Health hazards

Skin sensitization, category 1

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: WARNING

GHS Hazard statement(s): May cause an allergic skin reaction

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Avoid breathing dust/fume/gas/mist/ vapors/spray.
- Contaminated work clothing must not be allowed out of the workplace
- Wear protective gloves

Response:

- If on skin: Wash with plenty of water
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.

Storage:

- None needed

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Hazard(s) not otherwise classified (HNOC):

May be irritating to the eyes and skin. Contact with hot material can cause thermal burns.

Percentage of ingredient(s) of unknown acute toxicity:

Not applicable.

SECTION 3: Composition/information on ingredients

Chemical name	CAS#	Concentration (weight %)
Bisphenol-A-(epichlorohydrin)	25068-38-6	80-90%

SECTION 4: First-aid measures**Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:**

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

Skin contact: Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

Eye contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation occurs, call a physician.

Ingestion: Do NOT induce vomiting. If swallowed, wash mouth out with water provided the person is conscious. Follow with plenty of water. NEVER GIVE LIQUIDS TO AN UNCONCIOUS PERSON. Call a physician.

Most important symptoms/effects, acute and delayed:

May cause an allergic skin reaction. May be irritating to the eyes and skin. Contact with hot material can cause thermal burns.

Indication of immediate medical attention and special treatment needed:

If any symptoms are observed, contact a physician and give them this SDS sheet. Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Not expected to be flammable. Material will not burn unless preheated. Cool fire exposed containers with water.

Hazardous combustion products may include the following substances: Carbon monoxide, carbon dioxide.

Special protective equipment and precautions for fire-fighters:

Use water spray or fog for cooling exposed containers. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate all non-emergency personnel from area. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. If spill occurs on water notify appropriate authorities.

Methods and material for containment and cleaning up:

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area).

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to closed metal containers for later disposal. Wipe up with absorbent material (e.g., cloth, fleece). Clean

surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Large Spills: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Contain and collect spillage with inert, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibles:

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). Recommended storage temperature: 55-75°F

SECTION 8: Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

Substance	OSHA PEL	ACGIH TLV	NIOSH IDLH
Bisphenol-A-(epichlorohydrin)	None known	None known	None known

Appropriate engineering controls:

Ventilation rates should be matched to conditions. 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.

Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses, safety glasses with side shields or safety goggles. Use equipment for eye protection tested and approved under NIOSH standards.

Skin and hand protection: Wear chemical-resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical resistant apron.

Respiratory protection: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

General hygiene considerations: When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.):

Physical state: Viscous liquid

Color: Clear

Odor: Rotten eggs.

Odor threshold: Not available

pH: Not available

Melting point/freezing point: Not available

Initial boiling point and boiling range: > 260°C

Flash point: 249°C

Evaporation rate: Not available

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits

Lower limit (%): Not available

Upper limit (%): Not available

Vapor pressure: 0.03 mbar @ 77°C

Vapor density: Not available

Relative density: 1.17

Solubility (ies): Negligibly soluble in water.

Partition coefficient (n-octanol/water): Not available

Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: 500-700 cps

SECTION 10: Stability and reactivity

Reactivity: Not reactive under recommended storage and handling conditions.
Chemical stability: Stable under recommended storage and handling conditions.
Possibility of hazardous reactions: Hazardous reactions not anticipated under recommended storage and handling conditions.
Conditions to avoid: Avoid high temperatures.
Incompatible materials: Oxidizers, acids, and bases.
Hazardous decomposition Products: Carbon monoxide, Carbon dioxide (CO₂)

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: None expected.
Ingestion: None expected.
Skin: May cause an allergic skin reaction. May be irritating to skin. Contact with hot material can cause thermal burns.
Eyes: Causes serious eye irritation.
Target Organs: Skin, Eyes

Symptoms related to the physical, chemical, and toxicological characteristics:

May cause an allergic skin reaction. May be irritating to the eyes and skin. Contact with hot material can cause thermal burns.

Delayed and immediate effects and chronic effects from short or long-term exposure:

No additional effects known

Numerical measures of toxicity (such as acute toxicity estimates):

Ingredient Information:

Substance	Test Type (species)	Value
Bisphenol-A- (epichlorohydrin)	LD ₅₀ Oral (Rat)	11400 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	None known

Skin corrosion/irritation: May cause skin irritation
Serious eye damage/eye irritation: May cause eye irritation
Respiratory sensitization: Does not meet the criteria for classification

Skin sensitization:	May cause an allergic skin reaction
Germ cell mutagenicity:	Does not meet the criteria for classification
Carcinogenicity:	Does not meet the criteria for classification.
Reproductive toxicity:	Does not meet the criteria for classification.
Specific target organ toxicity-Single exposure:	Does not meet the criteria for classification
Specific target organ toxicity-Repeat exposure:	Does not meet the criteria for classification
Aspiration hazard:	Does not meet the criteria for classification

Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Component	IARC	NTP	ACGIH	OSHA
Bisphenol-A-(epichlorohydrin)	Not listed	Not listed	Not listed	Not listed

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Substance	Test Type	Species	Value
Bisphenol-A-(epichlorohydrin)	LC ₅₀	Fish	None known
	EC ₅₀	Aquatic Invertebrates	None known
	EC ₅₀	Algae	None known

Persistence and Degradability:

No data available

Bioaccumulative Potential:

No data available

Mobility in Soil:

No data available

Other adverse effects (such as hazardous to the ozone layer):

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Product

Dispose of waste materials in accordance with applicable local and national laws and



regulations. Where possible, recycling is preferred to disposal or incineration. Contact the proper local authorities.

Contaminated packaging

Since emptied containers retain product residue, follow label warnings even after container is emptied. Dispose of as unused product.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

Not regulated for transport

IMDG (Transport by sea)

Not regulated for transport

IATA (Country variations may apply)

Not regulated for transport

Environmental hazards

Marine pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

No further relevant information available.

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.

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All components are listed on the TSCA inventory or are exempted.

CERCLA RQ (lbs) Ingredients (> 0.1%):

Bisphenol-A-(epichlorohydrin) is NOT listed

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311, 312 and 313:

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) (> 0.1%):

Bisphenol-A-(epichlorohydrin) is NOT listed

Section 311/312 (40 CFR 370) (> 0.1%):

Respiratory or skin sensitization

Section 313 Toxic Release Inventory (40 CFR 372) (> 0.1%):

Bisphenol-A-(epichlorohydrin) is NOT listed

STATE REGULATIONS:



This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986:

Bisphenol-A-(epichlorohydrin) is NOT listed

Massachusetts Right to Know:

Bisphenol-A-(epichlorohydrin) is NOT listed

New Jersey Right to Know:

Bisphenol-A-(epichlorohydrin) is NOT listed

Pennsylvania Right to Know:

Bisphenol-A-(epichlorohydrin) is NOT listed

SECTION 16: Other Information

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DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer **MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE.** Given the variety of factors that can affect the use and application of this product, many of which are solely within the user's knowledge and control, the user is responsible for determining whether the usage of this product is fit for a particular purpose and suitable for the user's method of use or application. It is essential that the user, not the manufacturer, evaluates this product to determine whether it is fit for a particular purpose and suitable for the user's method of use or application.