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Epo Joint Sealant "B"

SECTION 1: Identification

Product identifier

Product name: Epo Joint Sealant "B"

Recommended use of the product and restriction on use

Relevant identified uses: Industrial Use Only

Uses advised against: Any use other than recommended above

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States

Dynamis Epoxy Systems 415 E. Venice Avenue Venice, FL 34285 941.488.3999 www.dcdynamis.com

Emergency telephone number:

United States

ChemTel (888)-255-3924 (24 hours)

SECTION 2: Hazard(s) identification

GHS classification:

Skin corrosion, category 1B Serious eye damage, category 1 Skin sensitization, category 1 Reproductive toxicity, category 2 Acute toxicity (oral), category 4

Label elements

Hazard pictograms:







Signal word: Danger **Hazard statements:**

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H317 May cause an allergic skin reaction

H361 Suspected of damaging fertility or the unborn child

H302 Harmful if swallowed

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection





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P272 Contaminated work clothing must not be allowed out of the workplace

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P270 Do not eat, drink or smoke when using this product

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

P363 Wash contaminated clothing before reuse

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 Immediately call a POISON CENTER/doctor

P321 Specific treatment (see Section 4 on this label)

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P302+P352 IF ON SKIN: Wash with plenty of water

P333+P313 If skin irritation or rash occurs: Get medical advice/attention

P308+P313 IF exposed or concerned: Get medical advice/attention

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 Rinse mouth

P405 Store locked up

P501 Dispose of contents/container in accordance with all local, regional, state, and federal regulations

Hazards not otherwise classified: None

Supplemental label elements:

34 percent of the mixture consists of ingredient(s) of unknown acute oral toxicity

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 68953-36-6	Fatty acids, tall-oil, reaction products with tetraethylenepentamine	30-35
CAS number: 112-24-3	Triethylenetetramine	<0.5
CAS number: 112-57-2	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	<5
CAS number: 14808-60-7	Silica, crystalline quartz	<2
CAS number: 1317-65-3	Limestone	<50
CAS number: 84852-15-3	Nonyl phenol	10-13

Additional Information:

The specific chemical identity and/or exact percentages (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200)

SECTION 4: First aid measures

Description of first aid measures

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General notes:

Show this Safety Data Sheet to the doctor in attendance. Take precautions to ensure your own safety before attempting rescue. Wear appropriate safety eyewear, gloves, protective clothing and respiratory protection to prevent exposure. See Section 8 of this SDS for personal protective equipment recommendations. Do not use the mouth to mouth method if victim has ingested or inhaled the product. Give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper device.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

After skin contact:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

After eye contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

Acute oral exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness.

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.

Immediate medical attention and special treatment

Specific treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

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Suitable extinguishing media:

Alcohol- resistant foam, Dry chemical or Carbon dioxide

Unsuitable extinguishing media:

For safety reasons, a full water jet should not be used as this may spread the fire.

Specific hazards during fire-fighting:

Non-combustible. Substance itself does not burn but may decompose upon heating to produce irritating fumes.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA)

Special precautions:

Keep upwind. Heating of container(s) will cause pressure rise with risk of bursting and subsequent explosion. Gives off toxic and irritant fumes when heated or burning. Keep container(s) cool with water. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Environmental precautions:

Avoid release to the environment. Prevent soil and water pollution. Prevent spreading in sewers. Notify authorities if product enters sewers or public waters

Methods and material for containment and cleaning up:

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to appropriate containers for disposal.

Reference to other sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

SECTION 7: Handling and storage

Precautions for safe handling:

Wear recommended personal protective equipment (see section 8). Only use with adequate ventilation. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Avoid breathing mist/vapor/spray. Do not eat, drink or smoke while handling this product. Wash hands, forearms and face after handling. Keep away from incompatible materials (see Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Do not store in direct sunlight and protect from freezing and physical damage. Store away from incompatible materials described in Section 10. Keep containers tightly closed when not in use.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
WEEL	Triethylenetetramine	112-24-3	TWA: 1 ppm
	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	112-57-2	8-Hour TWA: 6 mg/m³ (1.0 ppm)
ACGIH	Silica, crystalline quartz	14808-60-7	8-Hour TWA: 0.025 mg/m³ (Respirable particulate matter)
	Limestone	1317-65-3	TWA: 10 mg/m³ (Inhalable particulate matter containing no asbestos and < 1% crystalline silica)
NIOSH	Silica, crystalline quartz	14808-60-7	TWA: 0.05 mg/m³ (10 hr (Respirable fraction))
	Silica, crystalline quartz	14808-60-7	IDLH: 50 mg/m³ (Respirable fraction)
	Limestone	1317-65-3	REL: 10 mg/m³ (Total dust)
	Limestone	1317-65-3	REL: 5 mg/m³ (Respirable dust)
OSHA	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.05 mg/m³ ((Respirable Crystalline Silica))
	Silica, crystalline quartz	14808-60-7	Level Limit Value: 0.025 mg/m³ (Immediate Action Level - (Respirable Crystalline Silica))
	Limestone	1317-65-3	TWA: 15 mg/m³ (Total dust)
	Limestone	1317-65-3	PEL: 5 mg/m³ (Respirable fraction)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Contact with material may cause severe injury. Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Contact with material may cause severe injury. Use safety glasses with side shields or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. 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. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

Inhalation of material may cause severe injury. If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent)

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must be worn. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Light grey.
Odor	Slight Amine odor.
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	>200 °F
Evaporation rate	Nil
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	1mm Hg.
Vapor density	Not determined or not available.
Density	1.55g/cm3
Relative density	Not determined or not available.
Solubilities	Partly misble (water)
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	2875 cps
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Stable under normal conditions of storage, shipping, and use.

Chemical stability:

Stable under normal storage and handling conditions.

Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid:

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Incompatible materials.

Keep away from heat/sparks/open flames/hot surfaces and ignition sources. - No smoking.

Incompatible materials:

Strong oxidizing agents.

Organic peroxides.

Hazardous decomposition products:

In a fire, substance may produce irritating fumes (CO, CO2) along with Calcium Oxide.

SECTION 11: Toxicological information

Acute toxicity

Assessment:

Harmful if swallowed.

Product data: No data available.

Substance data:

Name	Route	Result
Triethylenetetramine	oral	LD50 Rat: 2500 mg/kg
	dermal	LD50 Rabbit: 850 mg/kg
Nonyl phenol	oral	LD50 Rat: 1300 mg/kg
3,6,9-	dermal	LD50 Dermal: 659 mg/kg
triazaundecamethylenediamine tetraethylenepentamine	oral	LD50 Oral: 3990 mg/kg

Skin corrosion/irritation

Assessment:

Causes severe skin burns and eye damage.

Product data:

No data available.

Substance data:

Name	Result
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	Causes severe skin burns.
Triethylenetetramine	Causes severe skin burns.
Nonyl phenol	Corrosive to the skin.
3,6,9- triazaundecamethylenediamine tetraethylenepentamine	Causes severe skin burns.

Serious eye damage/irritation

Assessment:

Causes serious eye damage.

Product data:

No data available.

Substance data:

Name	Result
Fatty acids, tall-oil, reaction products with	Causes serious eye damage.
tetraethylenepentamine	

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Name	Result
Triethylenetetramine	Causes serious eye damage.
Nonyl phenol	Causes serious eye damage.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction.

Product data:

No data available.

Substance data:

Name	Result
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	May cayse an allergic skin reaction.
Triethylenetetramine	May cause an allergic skin reaction.
3,6,9- triazaundecamethylenediamine tetraethylenepentamine	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

Species	Result
	The carcinogenic properties of Silica quartz have been observed in respirable quantities. However, because this product is presented in a liquid form, the risk of inhalation of respirable silica particles is diminished. Care should be taken so as to not produce dust which can be inhaled.

Substance data:

Name	Species	Result
Silica, crystalline quartz	Not applicable	May cause cancer via inhalation.

International Agency for Research on Cancer (IARC):

Name	Classification
Silica, crystalline quartz	Group 1

National Toxicology Program (NTP):

Name	Classification
Silica, crystalline quartz	Known to be human carcinogens

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Reproductive toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product data:

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No data available.

Substance data:

Name	Result
Nonyl phenol	Suspected human reproductive toxicant.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data:

Name	Result
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	May cayse respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data:

Name	Result
Silica, crystalline quartz	Causes damage to organs (Lungs) through prolonged or repeated
	exposure.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Information on likely routes of exposure:
Inhalation, Ingestion, Skin contact, Eye contact.

Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

Persistence and degradability
Product data: No data available.

Substance data:

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Name	Result
Nonyl phenol	Inherently biodegradable.

Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies. Dispose of in accordance with all applicable local, regional, state and federal regulations.

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	1760
UN proper shipping name	Corrosive liquids, n.o.s. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine, Nonyl phenol)
UN transport hazard class(es)	8
Packing group	II
Environmental hazards	Marine Pollutant (Nonyl phenol, 3,6,9-triazaundecamethylenediamine tetraethylenepentamine)
Special precautions for user	None
Passenger air/rail	1 L
Cargo aircraft only	30 L
Stowage category	В

International Maritime Dangerous Goods (IMDG)

UN number	1760
UN proper shipping name	Corrosive liquids, n.o.s. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine, Nonyl phenol)
UN transport hazard class(es)	8
Packing group	II
Environmental hazards	Marine Pollutant (Nonyl phenol, 3,6,9-triazaundecamethylenediamine tetraethylenepentamine)

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Special precautions for user	None
EmS number	F-A, S-B
Stowage category	В
Excepted quantities	E2
Limited quantity	1 L

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	1760
UN proper shipping name	Corrosive liquids, n.o.s. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine, Nonyl phenol)
UN transport hazard class(es)	8
Packing group	II
Environmental hazards	Marine Pollutant (Nonyl phenol, 3,6,9-triazaundecamethylenediamine tetraethylenepentamine)
Special precautions for user	None
ERG code	8L
Excepted quantities	E2
Passenger and cargo	1 L
Cargo aircraft only	30 L
Limited quantity	0.5 L

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

68953-36-6	Fatty acids, tall-oil, reaction products with tetraethylenepentamine	Listed
112-24-3	Triethylenetetramine	Listed
14808-60-7	Silica, crystalline quartz	Listed
1317-65-3	Limestone	Listed
84852-15-3	Nonyl phenol	Listed
112-57-2	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	Listed

Significant New Use Rule (TSCA Section 5):

84852-15-3 Nonyl phenol	Listed
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Export notification under TSCA Section 12(b):

84852-15-3	Nonyl phenol	Listed

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals:

84852-15-3	Nonyl phenol	Listed
112-57-2	, , ,	Not Listed

CERCLA: None of the ingredients are listed.

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RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

112-24-3	Triethylenetetramine	Listed
14808-60-7	Silica, crystalline quartz	Listed
1317-65-3	Limestone	Listed
84852-15-3	Nonyl phenol	Listed
112-57-2	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	Listed

New Jersey Right to Know:

112-24-3	Triethylenetetramine	Listed
14808-60-7	Silica, crystalline quartz	Listed
1317-65-3	Limestone	Listed
112-57-2	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	Listed

New York Right to Know:

112-24-3	Triethylenetetramine	Listed
112-57-2	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	Listed

Pennsylvania Right to Know:

112-24-3	Triethylenetetramine	Listed
14808-60-7	Silica, crystalline quartz	Listed
1317-65-3	Limestone	Listed
84852-15-3	Nonyl phenol	Listed
112-57-2	3,6,9-triazaundecamethylenediamine tetraethylenepentamine	Listed

California Proposition 65:

▲ **WARNING:** This product can expose you to Silica, crystalline quartz; which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

SECTION 16: Other information

Abbreviations and Acronyms: None **Disclaimer:**

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet