Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 02.15.2018

Revision Date: 10.22.2024

Z-TEC 751 Component A

SECTION 1: Identification

Product identifier

Product name: Z-TEC 751 Component A

Other means of identification

Synonyms: None

Product code: None

Additional information: None

Recommended use of the chemical and restrictions on use

Recommended use: CERAMIC FILED EPOXY

Restrictions on use: Any use other than recommended above.

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

Classification in accordance with paragraph (d) (1)(i) of §1910.1200, GHS Revision 7 and certain provision of GHS Revision 8:

Skin irritation, category 2
Eye irritation, category 2A
Skin sensitization, category 1

Label elements

Pictogram(s):

Signal Word: Warning

Hazard statements:

H315 Causes skin irritation
H319 Causes serious eye irritation
H317 May cause an allergic skin reaction

Precautionary statements:

P280 Wear protective gloves, protective clothing, eye protection and face protection
P264 Wash skin thoroughly for 15 minutes after handling
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing must not be allowed out of the workplace
P302+P352 IF ON SKIN: Wash with plenty of water and soap
P333+P313 If skin irritation or rash occurs: Get medical advice and attention

P362 Take off contaminated clothing and wash it before reuse

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

P337+P313 If eye irritation persists: Get medical advice and attention

P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label)

P501 Dispose of contents and container in accordance with local, regional, national, and international regulations

Hazards not otherwise classified: None

Supplemental label elements: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS Number: 1344-28-1	Aluminum Oxide	70-80
CAS Number: 25085-99-8	Bisphenol A epoxy resin	20-30

Additional Information:
The specific chemical identity and/or exact percentage (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

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.

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:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After eye contact:

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. If symptoms develop or persist, seek medical advice/attention.

After ingestion:

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. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms/effects, acute and delayed

Acute symptoms and effects:

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.
Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis.

Delayed symptoms and effects:

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

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

Not determined or not applicable.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

C02, Dry Chemical, Foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards arising from the chemical:

Thermal decomposition may produce Carbon Monoxide, Carbon dioxide, smoke.

Special protective equipment and precautions for fire-fighters

Special protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly 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 cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Aluminum Oxide	1344-28-1	8-Hour TWA-PEL: 5 mg/m³ (respirable fraction, as Al)
	Aluminum Oxide	1344-28-1	8-Hour TWA-PEL: 15 mg/m³ (total dust, as Al)
United States(California)	Aluminum Oxide	1344-28-1	8-Hour TWA-PEL: 5 mg/m³ (respirable fraction. as Al)
	Aluminum Oxide	1344-28-1	8-Hour TWA-PEL: 10 mg/m³ (total dust, as Al)
ACGIH	Aluminum Oxide	1344-28-1	8-Hour TWA: 1 mg/m³ (respirable particulate matter, as OEL)
NIOSH	Aluminum Oxide	1344-28-1	REL-TWA: 5 mg/m³ (respirable fraction, as Al [up to 10 hr])
	Aluminum Oxide	1344-28-1	REL-TWA: 10 mg/m³ (total dust, as Al [up to 10 hr])

Biological limit values:

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

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

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).

Individual protection measures, such as personal protective equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin 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:

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) must be worn.

General hygiene 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

Physical state	Paste
Color	Opaque blue
Odor	Mild epoxy odor
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flammability	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Flash point	>210 °F
Auto-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
pH	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Solubility	Negligible in water
Partition coefficient — n-octanol/water	Not determined or not available.
Vapor pressure	Not determined or not available.
Density	Not determined or not available.
Relative density	1.589
Relative vapor density	Not determined or not available.
Particle characteristics	Not determined or not available.

Other Information

Form	Opaque Blue Paste

SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions, including those associated with foreseeable emergencies:

None under normal conditions of use and storage.

Conditions to avoid:

Amine compounds under uncontrolled conditions.

Incompatible materials:
Strong acids and bases.

Hazardous decomposition products:
Carbon Monoxide, Carbon dioxide. smoke, & other products possible.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data:

Name	Route	Result
Aluminum Oxide	oral	LD50 Rat: >15,900 mg/kg
	inhalation	LC50 Rat: >10 mg/L (4 hr - Aerosol (mist))
Bisphenol A epoxy resin	oral	LD50 Rat: >2000 mg/kg

Skin corrosion/irritation

Assessment:
Causes skin irritation.
Product data:
No data available.
Substance data:

Name	Result
Bisphenol A epoxy resin	Causes skin irritation.

No data available.

Serious eye damage/irritation

Assessment:
Causes serious eye irritation.
Product data:
No data available.
Substance data:

Name	Result
Bisphenol A epoxy resin	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment:
May cause an allergic skin reaction.
Product data:
No data available.
Substance data:

Name	Result
Bisphenol A epoxy resin	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.
National Toxicology Program (NTP): None of the ingredients are listed.

OSHA Carcinogens: None of the ingredients are listed.

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: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Specific target organ toxicity (single exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Specific target organ toxicity (repeated exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Aspiration toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Interactive effects:
Not Applicable.

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:

Name	Result
Aluminum Oxide	Fish LC50 Oncorhynchus mykiss: 0.57 mg/L (96 hr)
	Aquatic Plants EC50 Green algae: 0.346 mg/L (72 hr - growth rate)
	Aquatic Invertebrates EC50 Ceriodaphnia dubia: 0.111 mg/L (48 hr - mortality)
Bisphenol A epoxy resin	Aquatic Invertebrates EC50 Daphnia magna: 1.1 - 2.8 mg/L (48 hr [mobility] [read-across substance])
	Aquatic Plants EC50 Scenedesmus capricornutum: 9 mg/L (48 hr [biomass] [read-across substance])

Chronic (long-term) toxicity

Assessment:

Toxic to aquatic life with long lasting effects.

Product data: No data available.

Substance data:

Name	Result
Aluminum Oxide	Fish LC50 Pimephales promelas: 3.999 mg/L (7 d)
	Aquatic Invertebrates EC50 Ceriodaphnia dubia: 0.222 mg/L (7 d - reproduction)

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Aluminum Oxide	Biodegradability studies are not applicable to inorganic substances.
Bisphenol A epoxy resin	The substance is not readily biodegradable. 5% degradation measured by O2 consumption, after 28 days.

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Aluminum Oxide	In general, metals do not biomagnify.

Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Aluminum Oxide	The potential of aluminium for adsorption to sediment and soil particles is mainly driven by its speciation and the concentration of dissolved organic carbon (DOC).

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Aluminum Oxide	PBT assessment does not apply to inorganic substances.

vPvB assessment:

Aluminum Oxide	vPvB assessment does not apply to inorganic substances.

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	UN 3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Bisphenol A Epoxy Resin
UN transport hazard class(es)	None
Packing group	III
Environmental hazards	None
Special precautions for user	None
Passenger Air/Rail	None
Cargo Aircraft Only	None
Stowage Category	Category A

International Maritime Dangerous Goods (IMDG) Code

UN number	UN 3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Bisphenol A Epoxy Resin
UN transport hazard class(es)	9 
Packing group	III
Environmental hazards	None
Special precautions for user	None
EmS Number	F-A, S-F
Stowage Category	Category A
Excepted Quantities	E1
Limited Quantity	5 Kg

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

UN number	UN 3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Bisphenol A Epoxy Resin
UN transport hazard class(es)	9 
Packing group	III
Environmental hazards	None
Special precautions for user	None
ERG Code	9L
Excepted Quantities	E1
Passenger and Cargo	400 kg
Cargo Aircraft Only	400 kg
Limited Quantity	30 kg

Transport in Bulk according to IMO Instruments

IMO hazard class	Not Applicable.
Environmental hazards	Not Applicable.
Material hazardous only in bulk	Not Applicable.
Cargo Group	Not Applicable.
Bulk Name	Not Applicable.

SECTION 15: Regulatory information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals:

1344-28-1	Aluminum Oxide	Listed

CERCLA: None of the ingredients are listed.

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:

1344-28-1	Aluminum Oxide	Listed

New Jersey Right to Know:

1344-28-1	Aluminum Oxide	Listed

New York Right to Know:

1344-28-1	Aluminum Oxide	Listed

Pennsylvania Right to Know:

1344-28-1	Aluminum Oxide	Listed

California Proposition 65: None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other information

Disclaimer:

This product has been classified in accordance with paragraph (d) (1)(i) of §1910.1200, GHS Revision 7 and certain provision of GHS Revision 8. 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