

SAFETY DATA SHEET



ELAN-Cast® E 023 FR Black Resin

Version 7

Revision Date 08/08/2016

Print Date 08/08/2016

SECTION 1. IDENTIFICATION

Product name : ELAN-Cast® E 023 FR Black Resin

Manufacturer or supplier's details

Company : ELANTAS PDG, INC.
5200 North 2nd Street
St. Louis MO 63147
Telephone : (314) 621-5700
Visit our web site : www.elantas.com
E-mail address : Todd.Thomas@altana.com
Emergency telephone number : INFOTRAC - 1-800-535-5053

Recommended use of the chemical and restrictions on use

Recommended use : Electrical Insulation

Restrictions on use : Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitisation : Category 1
Carcinogenicity : Category 2
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.

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

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

P281 Use personal protective equipment as required.

Response:

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

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

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

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

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

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

P362 Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Modified Epoxy Resin Solution

Hazardous components

Component	CAS-No.	Concentration (%)
Epoxy Resin	25068-38-6	>= 44 - < 45
Fine Mineral media	-	>= 9 - < 10
Alkyl (C12, C14) glycidyl ether	-	>= 3 - < 4
Carbon black	1333-86-4	>= 0 - < 1

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4-Morpholinecarboxaldehyde

4394-85-8

≥ 0 - < 1

SECTION 4. FIRST AID MEASURES

- General advice** : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled** : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact** : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact** : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed** : Induce vomiting immediately and call a physician.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Unsuitable extinguishing media** : High volume water jet
- Further information** : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters** : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures** : Use personal protective equipment.

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- Environmental precautions** : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up** : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.
Absorbent paper or other organic material used for cleaning up resin is a fire hazard, as heat and spontaneous combustion can occur, particularly if the resin was catalyzed. Catalyzed resin can generate hazardous exothermic heat if allowed to polymerize in a mass. All soiled or waste materials must be water soaked, and kept in a closed bin until disposed of.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling** : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
The chemical reaction that cures mixed epoxy is exothermic (heat generating). If left to cure in a contained mass, such as in a mixing vessel, it can generate enough heat to melt plastic, burn skin or ignite surrounding combustible materials. The larger or thicker the epoxy mass, the more heat generated.
- Conditions for safe storage** : Store under conditions specified on the product Technical Data Sheet to maintain product quality.
Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
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		(Form of exposure)	parameters / Permissible concentration	
Fine Mineral media	-	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total)	15 mg/m3	OSHA P0
		TWA (Respirable fraction)	5 mg/m3	OSHA P0
Carbon black	1333-86-4	TWA	3.5 mg/m3	ACGIH
		TWA	3.5 mg/m3	OSHA Z-1

Engineering measures

- : Use with adequate ventilation.
- All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)
- This product contains a particulate(s) that is considered hazardous per OSHA (29 CFR 1910.1200) and is listed in Section III as a precautionary warning.
- Under normal conditions of use, this product as supplied does not pose a health risk from particulate matter.
- Physical degradation of the cured product (i.e. sanding, abrading, etc.) may pose a dust hazard.
- Repeated inhalation of such dust may cause lung injury.

Personal protective equipment**Respiratory protection**

- : In the case of vapour formation use a respirator with an approved filter.

Hand protection**Remarks**

- : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

- : Eye wash bottle with pure water
- Tightly fitting safety goggles
- Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection

- : Impervious clothing
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

- : When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Vapour pressure	: No data available
Flash point	: Greater than 201 °F (94 °C) Method: Literature Value
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: No data available
Density	: 1.5760 g/cm3 (77 °F (25 °C))
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available

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Viscosity, kinematic : Greater than 22 mm²/s (104 °F (40 °C))

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No decomposition if stored and applied as directed.

Conditions to avoid : No data available

Hazardous decomposition products : The by-products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, CO and water.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

25068-38-6 Epoxy Resin:

Acute oral toxicity : LD50 (Rat): 11,400 mg/kg

LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 420
GLP: yes

Acute inhalation toxicity : LC50 : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): 23,400 mg/kg

LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

- Fine Mineral media:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

4394-85-8 4-Morpholinecarboxaldehyde:

Acute oral toxicity : LD50 (Rat): > 7,360 mg/kg

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Acute dermal toxicity : LD50 (Rabbit): > 18,400 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

25068-38-6 Epoxy Resin:

Species: Rabbit

Result: Moderate skin irritation

Species: Rabbit

Exposure time: 4 h

Method: OECD Test Guideline 404

Result: Skin irritation

GLP: yes

- Fine Mineral media:

Species: Rabbit

Result: Mild skin irritation

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Components:

25068-38-6 Epoxy Resin:

Species: Rabbit

Result: Eye irritation

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Components:

25068-38-6 Epoxy Resin:

Test Type: Mouse Local Lymph Node assay (LLNA)

Species: Mouse

Method: OECD Test Guideline 429

Result: May cause sensitisation by skin contact.

GLP: yes

Carcinogenicity

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IARC

Group 2B: Possibly carcinogenic to humans

Carbon black

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ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Aspiration toxicity

Components:

25068-38-6 Epoxy Resin:

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

25068-38-6 Epoxy Resin:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 1.7 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.3 mg/l
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes

Persistence and degradability

Components:

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25068-38-6 Epoxy Resin:

Biodegradability

: Result: Not readily biodegradable.
Method: OECD Test Guideline 301F
GLP: yes

Bioaccumulative potential

Components:

25068-38-6 Epoxy Resin:

Partition coefficient: n-octanol/water

: log Pow: 3.242 (25 °C)
pH: 7.1
Method: OECD Test Guideline 117
GLP: yes

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

EPA Hazardous Waste Code(s)

: none

Waste from residues

: Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Catalyzed resin can generate hazardous exothermic heat if allowed to polymerize in a mass. All soiled or waste materials must be water soaked, and kept in a closed bin until disposed of.
Dispose of the solid mass only if cure is complete and the mass has cooled. Follow federal, state or local disposal regulations.

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Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

US. EPA CERCLA Hazardous Substances (40 CFR 302)

This material does not contain any components with a CERCLA RQ.

SARA 304 - Emergency Release Notification

This material does not contain any components with a section 304 EHS RQ.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards

: Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with the 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

SARA 302

: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM/ Intermediate or Final VOC's (40 CFR 60.489).

Non-volatile (Wt) : Refer to the product technical data sheet for VOC information.

Massachusetts Right To Know

Fine Mineral media	-
Crystalline silica	14808-60-7
Cristobalite (SiO ₂)	14464-46-1

Pennsylvania Right To Know

Epoxy Resin	25068-38-6
Aluminium hydroxide	21645-51-2
Fine Mineral media	-
Alkyl (C12, C14) glycidyl ether	Not Assigned

New Jersey Right To Know

Epoxy Resin	25068-38-6
Aluminium hydroxide	21645-51-2
Fine Mineral media	-
Alkyl (C12, C14) glycidyl ether	Not Assigned
Carbon black	1333-86-4

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : NOT APPLICABLE

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

Carbon black	1333-86-4
Crystalline silica	14808-60-7
Cristobalite (SiO ₂)	14464-46-1
Phenyl glycidyl ether	122-60-1

The components of this product are reported in the following inventories:

TSCA : We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720.30(h).

Section 4 / 12(b) : Not applicable

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Section 5

Not applicable

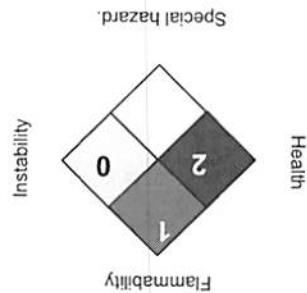
DSL

: We certify that all of the components of this product are listed on the DSL.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0

HMIS III:

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.