

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

SECTION 1. IDENTIFICATION

Product name : >ELAN-Tron® C 301 Hardener

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 : This product is for industrial use only. It is not intended for consumer use or retail sale.
Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 2

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitisation : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 + H312 Harmful if swallowed or in contact with skin.

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H330 Fatal if inhaled.
 H335 May cause respiratory irritation.
 H361 Suspected of damaging fertility or the unborn child.

Precautionary statements

: **Prevention:**

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P284 Wear respiratory protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
 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.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P363 Wash contaminated clothing 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

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

Chemical nature : Aliphatic Amine
Hazardous components

Component	CAS-No.	Concentration (%)
Diethylenetriamine	111-40-0	>= 99 - < 100
Ethyleneamine	140-31-8	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
 Consult a physician.
 Show this safety data sheet to the doctor in attendance.
 Symptoms of poisoning may appear several hours later.
 Do not leave the victim unattended.
- If inhaled : Call a physician or poison control centre immediately.
 If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
 If on skin, rinse well with water.
 If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
 In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 Continue rinsing eyes during transport to hospital.
 Remove contact lenses.
 Protect unharmed eye.
 Keep eye wide open while rinsing.
 If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
 Do NOT induce vomiting.
 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
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

Special protective equipment for firefighters : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
 : 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.
 Ensure adequate ventilation.
 Evacuate personnel to safe areas.

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.

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.
 To avoid spills during handling keep bottle on a metal tray.
 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.

Conditions for safe storage : Store under conditions specified on the product Technical Data Sheet to maintain product quality.
 Prevent unauthorized access.
 Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Diethylenetriamine	111-40-0	TWA	1 ppm	ACGIH
Diethylenetriamine		TWA	1 ppm 4 mg/m ³	OSHA P0

Hazardous components without workplace control parameters

Engineering measures : Use with adequate ventilation.
 All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)

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 : Avoid contact with skin, eyes and clothing.
 When using do not eat or drink.
 When using do not smoke.
 Wash hands before breaks and immediately after handling the product.

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 : > 201 °F (> 94 °C)
 Method: No information available.
 Information taken from reference works and the literature.

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

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	:	0.94 g/cm ³ (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
Ignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	> 21 mm ² /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	:	Carbon monoxide in a fire. Nitrogen oxides in a fire. Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure
Acute toxicity

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

Product:

Acute oral toxicity : Acute toxicity estimate : 1,086 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 0.5 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 1,056 mg/kg
Method: Calculation method

Components:**111-40-0 Diethylenetriamine:**

Acute oral toxicity : LD50 (Rat): 1,080 mg/kg

Acute inhalation toxicity : LC50 : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): 1,050 mg/kg

140-31-8 Ethyleneamine:

Acute oral toxicity : LD50 (Rat, male): 2,097 mg/kg
GLP: no

Acute dermal toxicity : LD50 (Rabbit, male): 866 mg/kg
GLP: no

Skin corrosion/irritation**Product:**

Remarks: Extremely corrosive and destructive to tissue.

Components:**111-40-0 Diethylenetriamine:**

Species: Rabbit
Result: Corrosive to skin

140-31-8 Ethyleneamine:

Species: Rabbit
Result: Corrosive

Serious eye damage/eye irritation**Product:**

Remarks: May cause irreversible eye damage.

Components:**111-40-0 Diethylenetriamine:**

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

Species: Rabbit
Result: Corrosive to eyes

140-31-8 Ethyleneamine:

Species: Rabbit
Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation**Product:**

Remarks: Causes sensitisation.

Components:**111-40-0 Diethylenetriamine:**

Test Type: Maximisation Test
Exposure routes: Dermal
Species: Guinea pig
Method: OECD Test Guideline 406
Result: May cause sensitisation by skin contact.
GLP: yes

140-31-8 Ethyleneamine:

Test Type: Maximisation Test
Exposure routes: Dermal
Species: Guinea pig
Method: OECD Test Guideline 406
Result: May cause sensitisation by skin contact.

Carcinogenicity**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

Further information**Product:**

Remarks: No data available

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects
Product:

Results of PBT and vPvB assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

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.

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

SECTION 14. TRANSPORT INFORMATION
International Regulations
IATA-DGR

UN/ID No. : UN 2079
 Proper shipping name : Diethylenetriamine
 Class : 8

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

Packing group : II
 Labels : Corrosive
 Packing instruction (cargo aircraft) : 855
 Packing instruction (passenger aircraft) : 851

IMDG-Code

UN number : UN 2079
 Proper shipping name : DIETHYLENETRIAMINE
 Class : 8
 Packing group : II
 Labels : 8
 EmS Code : F-A, S-B
 Marine pollutant : no

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**

UN/ID/NA number : UN 2079
 Proper shipping name : Diethylenetriamine
 Class : 8
 Packing group : II
 Labels : Corrosive
 Marine pollutant : no

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.

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

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.

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).

Massachusetts Right To Know

Diethylenetriamine 111-40-0

Pennsylvania Right To Know

Diethylenetriamine 111-40-0

New Jersey Right To Know

Diethylenetriamine 111-40-0

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : Not Applicable

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

Section 5 : Not applicable

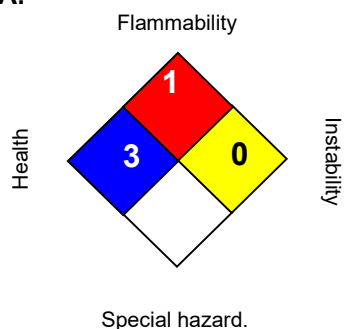
DSL : We certify that all of the components of this product are listed on the DSL.

>ELAN-Tron® C 301 Hardener

Version 5

Revision Date 04/25/2019

Print Date 06/08/2020

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

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

Revision Date : 04/25/2019

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.

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

SECTION 1. IDENTIFICATION

Product name : ELAN-Tron® E 203 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 1A

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

Specific target organ toxicity - repeated exposure (Inhalation) : Category 1 (Lungs)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

H335 May cause respiratory irritation.
 H350 May cause cancer.
 H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Precautionary statements : **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor 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

Hazardous components

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

Component	CAS-No.	Concentration (%)
Epoxy Resin	25068-38-6	>= 50 - < 51
Magnesium Silicate Talc (contains no asbestos fibers)	14807-96-6	>= 43 - < 44
Amorphous silica gel	112945-52-5	>= 3 - < 4
Crystalline silica	14808-60-7	>= 0.1 - < 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.

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

the technological safety standards.

High temperature exposure during storage for extended periods of time may result in spontaneous uncontrolled exothermic polymerization. This increases pressure inside a closed container and may result in the violent rupture of the container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Magnesium Silicate Talc (contains no asbestos fibers)	14807-96-6	TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
Magnesium Silicate Talc (contains no asbestos fibers)		TWA (Respirable fraction)	2 mg/m ³	ACGIH
Amorphous silica gel	112945-52-5	TWA	80 mg/m ³	OSHA Z-1
Crystalline silica	14808-60-7	TWA (total dust)	30 mg/m ³ / %SiO ₂ +2	OSHA Z-3
Crystalline silica		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
Crystalline silica		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
Crystalline silica		TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0
Crystalline silica		TWA (Respirable fraction)	0.025 mg/m ³ (Silica)	ACGIH

Hazardous components without workplace control parameters

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

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

	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.

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: ASTM D 93
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

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

Density	:	1.6320 g/cm ³ (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
Ignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	Greater than 22 mm ² /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

Inhalation
 Skin contact
 Eyes

Acute toxicity
Product:

Acute oral toxicity : Acute toxicity estimate : 4,959 mg/kg
 Method: Calculation method

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

Acute dermal toxicity : Acute toxicity estimate : 4,959 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

112945-52-5 Amorphous silica gel:

Acute oral toxicity : LD50 (Rat): > 10,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.1390 mg/l

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

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

112945-52-5 Amorphous silica gel:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

Serious eye damage/eye irritation
Product:

Remarks: May cause irreversible eye damage.

Components:
25068-38-6 Epoxy Resin:

Species: Rabbit

Result: Eye irritation

112945-52-5 Amorphous silica gel:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

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

IARC	Group 1: Carcinogenic to humans	
	Crystalline silica	14808-60-7
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.	
NTP	Known to be human carcinogen	
	Crystalline silica	14808-60-7

Aspiration toxicity
Components:
25068-38-6 Epoxy Resin:

No aspiration toxicity classification

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

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.

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

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)**

Calculated RQ exceeds reasonably attainable upper limit.

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.

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

Print Date 09/27/2018

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.

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 SOCMII 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

Magnesium Silicate Talc (contains no asbestos fibers)	14807-96-6
Crystalline silica	14808-60-7

Pennsylvania Right To Know


Epoxy Resin	25068-38-6
Magnesium Silicate Talc (contains no asbestos fibers)	14807-96-6
Amorphous silica gel	112945-52-5

New Jersey Right To Know

Epoxy Resin	25068-38-6
Magnesium Silicate Talc (contains no asbestos fibers)	14807-96-6
Amorphous silica gel	112945-52-5
Chlorite	1318-59-8
Crystalline silica	14808-60-7

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

California Prop. 65

 **WARNING:** This product can expose you to chemicals including Crystalline silica, Carbon black, Phenyl glycidyl ether, which is/are known to the State of California to cause cancer, and Methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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).

ELAN-Tron® E 203 Black Resin

Version 6

Revision Date 09/27/2018

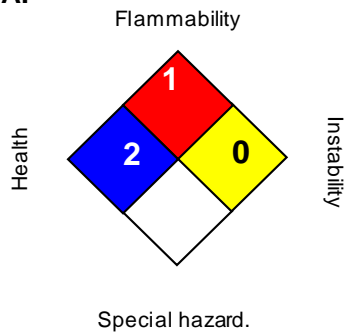
Print Date 09/27/2018

Section 4 / 12(b) : Not applicable
 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:



HMIS III:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

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

Revision Date : 09/27/2018

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.