



BUILDING TRUST



Safety Data Sheet

acc. to OSHA HCS

Printing date 05/05/2018

Reviewed on 09/17/2015

1 Identification

- **Product identifier**
- **Trade name:** EC415 Resin
- **Article number:** 1415088
- **Application of the substance / the mixture** Epoxy resin
- **Details of the supplier of the safety data sheet** SikaAxson US - EHS Department
- **Manufacturer/Supplier:**
Company Name: Axson Technologies US, Inc.-SikaAxson

Headquarters:
31200 Stephenson Hwy
Madison Heights, MI 48071
USA

Manufacturing Site:
1611 Hults Drive
Eaton Rapids, MI 48827
USA
ehs-us@axson.com

- **Information department:** Product safety department
- **Emergency telephone number:**
During normal opening times: +1 (248) 588-2270
CHEMTREC 24-hour Emergency: +1 (800) 424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Water-react. 3 H261 In contact with water releases flammable gas.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS07

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- **Signal word** *Warning*

- **Hazard-determining components of labeling:**

Epoxy Resin

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane
 bis[4-(2,3-epoxypropoxy)phenyl]propane

- **Hazard statements**

In contact with water releases flammable gas.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Handle under inert gas. Protect from moisture.

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

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

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

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

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store in a dry place. Store in a closed container.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 2

The substance demonstrates unusual reactivity with water.

- **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2

FIRE 1 Fire = 1

REACTIVITY 2 Reactivity = 2

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*

- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

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· Dangerous components:

| | | |
|--------------------------------------|---|----------|
| CAS: 7429-90-5 EINECS: 231-072-3 | aluminum powder (stabilised) | 20-50% |
| CAS: 25068-38-6 NLP: 500-033-5 | Epoxy Resin | 10-20% |
| CAS: 17557-23-2 EINECS: 241-536-7 | 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane | ≥5-<10% |
| CAS: 1675-54-3 EINECS: 216-823-5 | bis[4-(2,3-epoxypropoxy)phenyl]propane | ≥2.5-<5% |

4 First-aid measures**· Description of first aid measures****· After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.**· After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.**· Information for doctor:****· Most important symptoms and effects, both acute and delayed** No further relevant information available.**· Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures**· Extinguishing media****· Suitable extinguishing agents:**CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**· For safety reasons unsuitable extinguishing agents:** Water**· Special hazards arising from the substance or mixture** No further relevant information available.**· Advice for firefighters****· Protective equipment:** Wear self-contained respiratory protective device.**· Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures**· Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

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Do not flush with water or aqueous cleansing agents

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

| | | |
|------------|---|-------------------------|
| 25068-38-6 | Epoxy Resin | 90 mg/m ³ |
| 1344-28-1 | aluminium oxide | 15 mg/m ³ |
| 1675-54-3 | bis[4-(2,3-epoxypropoxy)phenyl]propane | 39 mg/m ³ |
| 67762-90-7 | Silicones and siloxanes, dimethyl-, reaction products with silica | 120 mg/m ³ |
| 14808-60-7 | Quartz (SiO ₂) | 0.075 mg/m ³ |

· **PAC-2:**

| | | |
|------------|---|-------------------------|
| 25068-38-6 | Epoxy Resin | 990 mg/m ³ |
| 1344-28-1 | aluminium oxide | 170 mg/m ³ |
| 1675-54-3 | bis[4-(2,3-epoxypropoxy)phenyl]propane | 430 mg/m ³ |
| 67762-90-7 | Silicones and siloxanes, dimethyl-, reaction products with silica | 1,300 mg/m ³ |
| 14808-60-7 | Quartz (SiO ₂) | 33 mg/m ³ |

· **PAC-3:**

| | | |
|------------|---|-------------------------|
| 25068-38-6 | Epoxy Resin | 5,900 mg/m ³ |
| 1344-28-1 | aluminium oxide | 990 mg/m ³ |
| 1675-54-3 | bis[4-(2,3-epoxypropoxy)phenyl]propane | 2,600 mg/m ³ |
| 67762-90-7 | Silicones and siloxanes, dimethyl-, reaction products with silica | 7,900 mg/m ³ |
| 14808-60-7 | Quartz (SiO ₂) | 200 mg/m ³ |

7 Handling and storage

· **Handling:**

· **Precautions for safe handling** No special precautions are necessary if used correctly.

· **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

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- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
*Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.*
- **Breathing equipment:** *Not required.*
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
 - **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

| | |
|------------------------|-------------------|
| Form: | Thixotropic Paste |
| Color: | Grey |
| Odor: | Characteristic |
| Odor threshold: | Not determined. |
- **pH-value:** Not determined.

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| | |
|---|--|
| · Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 2,500 °C (4,532 °F) |
| · Flash point: | 94 °C (201.2 °F) |
| · Flammability (solid, gaseous): | Not applicable. |
| · Ignition temperature: | 400 °C (752 °F) |
| · Decomposition temperature: | Not determined. |
| · Auto igniting: | Product is not selfigniting. |
| · Danger of explosion: | Not determined. |
| · Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| · Vapor pressure: | Not determined. |
| · Density at 20 °C (68 °F): | 2.04 g/cm ³ (17.02 lbs/gal) |
| · Relative density | Not determined. |
| · Vapor density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with | |
| Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| VOC content: | 0.00 % 0.0 g/l / 0.00 lb/gl |
| Solids content: | 56.3 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Contact with water releases flammable gases.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
?

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Carbon monoxide and carbon dioxide

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11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

| | | |
|------------|--|---|
| 1675-54-3 | bis[4-(2,3-epoxypropoxy)phenyl]propane | 3 |
| 14808-60-7 | Quartz (SiO ₂) | 1 |

- **NTP (National Toxicology Program)**

| | | |
|------------|----------------------------|---|
| 14808-60-7 | Quartz (SiO ₂) | K |
|------------|----------------------------|---|

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

| | |
|---|---|
| <ul style="list-style-type: none"> · UN-Number · DOT · IMDG, IATA | not regulated UN3082 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · IMDG · IATA | As stated below: not regulated ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin) |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT · Class | not regulated |
| <ul style="list-style-type: none"> · IMDG, IATA  | |
| <ul style="list-style-type: none"> · Class · Label | 9 Miscellaneous dangerous substances and articles 9 |
| <ul style="list-style-type: none"> · Packing group · DOT · IMDG, IATA | not regulated III |
| <ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (IATA): | Yes Symbol (fish and tree) Symbol (fish and tree) |
| <ul style="list-style-type: none"> · Special precautions for user · EMS Number: · Stowage Category | Warning: Miscellaneous dangerous substances and articles F-A,S-F A |
| <ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |

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· **UN "Model Regulation":** UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (EPOXY RESIN), 9, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7429-90-5 aluminum powder (stabilised)

1344-28-1 aluminium oxide

· **TSCA (Toxic Substances Control Act) (Substances not listed):**

All ingredients are listed.

· **Chemicals regulated by TSCA Section 12(b)**

87093-13-8 Hydroxyphenylethane Triglycidyl Ether

· **Chemical regulated by TSCA 5(a)(2)rule:**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

1317-65-3 Calcium Carbonate

14808-60-7 Quartz (SiO₂)

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

7429-90-5 aluminum powder (stabilised) A4

1344-28-1 aluminium oxide A4

14808-60-7 Quartz (SiO₂) A2

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7 Quartz (SiO₂)

· **Listed in CWC Regulations**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms



GHS02 GHS07

· Signal word *Warning*

· Hazard-determining components of labeling:

Epoxy Resin

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane
bis[4-(2,3-epoxypropoxy)phenyl]propane

· Hazard statements

*In contact with water releases flammable gas.**Causes skin irritation.**Causes serious eye irritation.**May cause an allergic skin reaction.**Harmful to aquatic life with long lasting effects.*

· Precautionary statements

*Handle under inert gas. Protect from moisture.**Avoid breathing dust/fume/gas/mist/vapors/spray**Avoid release to the environment.**Wear protective gloves/protective clothing/eye protection/face protection.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**If skin irritation or rash occurs: Get medical advice/attention.**If eye irritation persists: Get medical advice/attention.**Wash contaminated clothing before reuse.**Store in a dry place. Store in a closed container.**Dispose of contents/container in accordance with local/regional/national/international regulations.*

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision 05/05/2018 / 6

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

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*OSHA: Occupational Safety & Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Water-react. 3: Substances and mixtures which in contact with water emit flammable gases – Category 3**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A**Skin Sens. 1: Skin sensitisation – Category 1**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3*

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