

1 Identification

- **Product identifier**
- **Trade name:** TCC230 Resin
- **Article number:** I230088
- **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**



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.
 Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



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 Acute 3 H402 Harmful to aquatic life.

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

(Contd. on page 2)

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 1)

· Hazard pictograms


GHS07 GHS08 GHS09

· Signal word Warning

· Hazard-determining components of labeling:

Reaction Product of Bisphenol A and Epichlorohydrin
 2,3-epoxypropyl o-tolyl ether

· Hazard statements

Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing genetic defects.
 Suspected of damaging fertility or the unborn child.
 Harmful to aquatic life.
 Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray
 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 exposed or concerned: Get medical advice/attention.
 Specific treatment (see on this label).
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
· NFPA ratings (scale 0 - 4)

· HMIS-ratings (scale 0 - 4)

· Other hazards
· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

US

(Contd. on page 3)

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 2)

3 Composition/information on ingredients

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

- **Dangerous components:**

CAS: 25068-38-6 NLP: 500-033-5	Reaction Product of Bisphenol A and Epichlorohydrin	50-100%
CAS: 2210-79-9 EINECS: 218-645-3	2,3-epoxypropyl o-tolyl ether	10%
CAS: 84852-15-3 EINECS: 284-325-5	4-nonylphenol, branched	≥0.25-≤1%

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:** Use fire fighting measures that suit the environment.
- **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** Not required.
- **Environmental precautions:** Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

US

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 3)

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals
· PAC-1:

25068-38-6	Reaction Product of Bisphenol A and Epichlorohydrin	90 mg/m ³
84852-15-3	4-nonylphenol, branched	3.9 mg/m ³
1330-20-7	xylene	130 ppm
100-41-4	ethylbenzene	33 ppm
108-88-3	toluene	67 ppm

· PAC-2:

25068-38-6	Reaction Product of Bisphenol A and Epichlorohydrin	990 mg/m ³
84852-15-3	4-nonylphenol, branched	43 mg/m ³
1330-20-7	xylene	920* ppm
100-41-4	ethylbenzene	1100* ppm
108-88-3	toluene	560 ppm

· PAC-3:

25068-38-6	Reaction Product of Bisphenol A and Epichlorohydrin	5,900 mg/m ³
84852-15-3	4-nonylphenol, branched	260 mg/m ³
1330-20-7	xylene	2500* ppm
100-41-4	ethylbenzene	1800* ppm
108-88-3	toluene	3700* ppm

7 Handling and storage

· Handling:

- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.

· 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.
- **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.

· 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.

(Contd. on page 5)

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 4)

- **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:	Viscous
Color:	Whitish
Odor:	uncharacteristic
Odor threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	110 °C (230 °F)

· Flash point: 105 °C (221 °F)

· Flammability (solid, gaseous): Not applicable.

(Contd. on page 6)

US

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 5)

· Ignition temperature:	
Decomposition temperature:	<i>Not determined.</i>
· Auto igniting: <i>Product is not selfigniting.</i>	
· Danger of explosion: <i>Product does not present an explosion hazard.</i>	
· Explosion limits:	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
· Vapor pressure: <i>Not determined.</i>	
· Density at 20 °C (68 °F): <i>1.13 g/cm³ (9.43 lbs/gal)</i>	
· Relative density <i>Not determined.</i>	
· Vapor density <i>Not determined.</i>	
· Evaporation rate <i>Not determined.</i>	
· Solubility in / Miscibility with Water: <i>Not miscible or difficult to mix.</i>	
· Partition coefficient (n-octanol/water): <i>Not determined.</i>	
· Viscosity:	
Dynamic:	<i>Not determined.</i>
Kinematic:	<i>Not determined.</i>
· Solvent content:	
Organic solvents:	<i>0.0 %</i>
VOC content:	<i>0.03 %</i>
	<i>0.3 g/l / 0.00 lb/gl</i>
· Solids content: <i>0.0 %</i>	
· Other information <i>No further relevant information available.</i>	

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** *No dangerous reactions known.*
- **Conditions to avoid** *No further relevant information available.*
- **Incompatible materials:** *No further relevant information available.*
- **Hazardous decomposition products:**
- ?
- Carbon monoxide and carbon dioxide*

(Contd. on page 7)

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 6)

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)**

1330-20-7	xylene	3
100-41-4	ethylbenzene	2B
108-88-3	toluene	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **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:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 8)

Printing date 03/07/2018

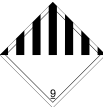

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 7)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, ADN · IMDG, IATA 	<p>not regulated UN3082</p>
<ul style="list-style-type: none"> · UN proper shipping name · DOT, ADN · IMDG · IATA 	<p>not regulated ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin, o-Cresyl glycidyl ether), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin, o-Cresyl glycidyl ether)</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADN · Class 	<p>not regulated</p>
<ul style="list-style-type: none"> · IMDG, IATA 	
 	
<ul style="list-style-type: none"> · Class · Label 	<p>9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> · Packing group · DOT · IMDG, IATA 	<p>not regulated III</p>
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (IATA): 	<p>Product contains environmentally hazardous substances: 4-nonylphenol, branched, Epoxy Resin Yes Symbol (fish and tree) Symbol (fish and tree)</p>
<ul style="list-style-type: none"> · Special precautions for user · EMS Number: · Stowage Category 	<p>Not applicable. F-A,S-F A</p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<p>Not applicable.</p>
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) 	<p>5L</p>

(Contd. on page 9)

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 8)

· **Exempted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

not regulated

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):**

84852-15-3 | 4-nonylphenol, branched

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

All ingredients are listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **TSCA new (21st Century Act) (Substances not listed)**

· Proposition 65

· **Chemicals known to cause cancer:**

100-41-4 | ethylbenzene

· **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:**

108-88-3 | toluene

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

1330-20-7 | xylene

I

100-41-4 | ethylbenzene

D

108-88-3 | toluene

II

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

1330-20-7 | xylene

A4

100-41-4 | ethylbenzene

A3

108-88-3 | toluene

A4

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

None of the ingredients is listed.

(Contd. on page 10)

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 9)

· 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).

· Hazard pictograms


GHS07 GHS08 GHS09

· Signal word Warning

· Hazard-determining components of labeling:

 Reaction Product of Bisphenol A and Epichlorohydrin
 2,3-epoxypropyl o-tolyl ether

· Hazard statements

 Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing genetic defects.
 Suspected of damaging fertility or the unborn child.
 Harmful to aquatic life.
 Toxic to aquatic life with long lasting effects.

· Precautionary statements

 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 exposed or concerned: Get medical advice/attention.
 Specific treatment (see on this label).
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Store locked up.
 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 03/07/2018 / 2

· 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)

(Contd. on page 11)



BUILDING TRUST



Safety Data Sheet acc. to OSHA HCS

Page 11/11

Printing date 03/07/2018

Reviewed on 03/07/2018

Trade name: TCC230 Resin

(Contd. of page 10)

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

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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

Muta. 2: Germ cell mutagenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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