Safety Data Sheet
acc. to OSHA HCS

Printing date 08/17/2018 Reviewed on 08/17/2018

1 Identification

· **Product identifier**

· **Trade name: L 140 Resin**

· **Article number:** I026106
· **Application of the substance / the mixture** Epoxy resin

· **Details of the supplier of the safety data sheet** SikaAxson US - EHS Department
· **Manufacturer/Supplier:**
Supplier's 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**

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 2	H401	Toxic to aquatic life.

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

GHS07 GHS09

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· **Signal word** Warning

· **Hazard-determining components of labeling:**
bis[4-(2,3-epoxypropoxy)phenyl]propane
Reaction Product of Bisphenol A and Epichlorohydrin
Epoxy phenol novolac resin
Reaction product of Phenol-Formaldehyde Novolac with Epichlorohydrin
1,4-bis(2,3-epoxypropoxy)butane
oxirane, mono[(C12-14-alkyloxy)methyl] derivs
Alkyl C12-C14 Glycidyl Ether

· **Hazard statements**
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Toxic 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 / 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.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see on this label).
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2
Fire = 1
Reactivity = 0

· **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: 1675-54-3 EINECS: 216-823-5	bis[4-(2,3-epoxypropoxy)phenyl]propane	≥25-≤50%
CAS: 25068-38-6 NLP: 500-033-5	Reaction Product of Bisphenol A and Epichlorohydrin	≥25-≤50%
CAS: 28064-14-4	Epoxy phenol novolac resin Reaction product of Phenol-Formaldehyde Novolac with Epichlorohydrin	10-20%
CAS: 2425-79-8 EINECS: 219-371-7	1,4-bis(2,3-epoxypropoxy)butane	≥5-<10%
CAS: 68609-97-2 EINECS: 271-846-8	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Alkyl C12-C14 Glycidyl Ether	≥5-<10%

4 First-aid measures

· **Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **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:**
Do not allow product to reach sewage system or any water course.
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).

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Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

· ***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:**		
1675-54-3	bis[4-(2,3-epoxypropoxy)phenyl]propane	39 mg/m³
25068-38-6	Reaction Product of Bisphenol A and Epichlorohydrin	90 mg/m³
28064-14-4	Epoxy phenol novolac resin Reaction product of Phenol-Formaldehyde Novolac with Epichlorohydrin	30 mg/m³
2425-79-8	1,4-bis(2,3-epoxypropoxy)butane	16 mg/m³
67762-90-7	Silicones and siloxanes, dimethyl-, reaction products with silica	120 mg/m³
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	9.3 mg/m³
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
95-63-6	1,2,4-trimethylbenzene	140 ppm
98-82-8	cumene	50 ppm
111-66-0	oct-1-ene	40 ppm

· **PAC-2:**		
1675-54-3	bis[4-(2,3-epoxypropoxy)phenyl]propane	430 mg/m³
25068-38-6	Reaction Product of Bisphenol A and Epichlorohydrin	990 mg/m³
28064-14-4	Epoxy phenol novolac resin Reaction product of Phenol-Formaldehyde Novolac with Epichlorohydrin	330 mg/m³
2425-79-8	1,4-bis(2,3-epoxypropoxy)butane	170 mg/m³
67762-90-7	Silicones and siloxanes, dimethyl-, reaction products with silica	1,300 mg/m³
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	100 mg/m³
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
95-63-6	1,2,4-trimethylbenzene	360 ppm
98-82-8	cumene	300 ppm
111-66-0	oct-1-ene	800* ppm

· **PAC-3:**		
1675-54-3	bis[4-(2,3-epoxypropoxy)phenyl]propane	2,600 mg/m³
25068-38-6	Reaction Product of Bisphenol A and Epichlorohydrin	5,900 mg/m³
28064-14-4	Epoxy phenol novolac resin Reaction product of Phenol-Formaldehyde Novolac with Epichlorohydrin	2,000 mg/m³
2425-79-8	1,4-bis(2,3-epoxypropoxy)butane	220 mg/m³
67762-90-7	Silicones and siloxanes, dimethyl-, reaction products with silica	7,900 mg/m³
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	230 mg/m³
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
95-63-6	1,2,4-trimethylbenzene	480 ppm
98-82-8	cumene	730 ppm

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111-66-0	oct-1-ene	2000* ppm

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **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.

· **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:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **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.

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· **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:	Liquid
Color:	Off-white
· **Odor:**	Light
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>200 °C (>392 °F)
· **Flash point:**	112 °C (233.6 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure:**	Not determined.
· **Density at 20 °C (68 °F):**	1.13 g/cm³ (9.43 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 at 20 °C (68 °F):	6,000-8,000 mPas
Kinematic:	Not determined.

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· **Solvent content:**	
Organic solvents:	0.1 %
VOC content:	0.08 % 0.9 g/l / 0.01 lb/gal
Solids content:	0.8 %
· **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** 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

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
98-82-8	cumene	2B

· **NTP (National Toxicology Program)**		
98-82-8	cumene	R

· **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.

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· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Toxic for 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.
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.

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

14 Transport information

· **UN-Number**	
· **DOT**	NA3082
· **IMDG, IATA**	UN3082
· **UN proper shipping name**	
· **DOT**	Environmentally hazardous substances, liquid, n.o.s. (Epoxy Resin, Epoxy phenol novolac resin)
· **IMDG**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin, Epoxy phenol novolac resin), MARINE POLLUTANT
· **IATA**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin, Epoxy phenol novolac resin)
· **Transport hazard class(es)**	
· **DOT, IMDG, IATA**	

· **Class**	9 Miscellaneous dangerous substances and articles
· **Label**	9

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· **Packing group**	
· **DOT, IMDG, IATA**	III
· **Environmental hazards:**	Product contains environmentally hazardous substances: Epoxy phenol novolac resin, Epoxy Resin
· **Marine pollutant:**	Yes (DOT) Symbol (fish and tree)
· **Special marking (IATA):**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Miscellaneous dangerous substances and articles
· **Danger code (Kemler):**	90
· **EMS Number:**	F-A,S-F
· **Stowage Category**	A
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: No limit On cargo aircraft only: No limit
· **Remarks:**	Special marking with the symbol (fish and tree).
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (EPOXY RESIN, EPOXY PHENOL NOVOLAC 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):**
None of the ingredients is listed.

· **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.

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· **Proposition 65**

· **Chemicals known to cause cancer:**	
98-82-8	cumene

· **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)**		
95-63-6	1,2,4-trimethylbenzene	II
98-82-8	cumene	D, CBD

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **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 GHS09

· **Signal word** Warning

· **Hazard-determining components of labeling:**
bis[4-(2,3-epoxypropoxy)phenyl]propane
Reaction Product of Bisphenol A and Epichlorohydrin
Epoxy phenol novolac resin
Reaction product of Phenol-Formaldehyde Novolac with Epichlorohydrin
1,4-bis(2,3-epoxypropoxy)butane
oxirane, mono[(C12-14-alkyloxy)methyl] derivs
Alkyl C12-C14 Glycidyl Ether
· **Hazard statements**
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Toxic 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.

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Wear protective gloves / 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.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see on this label).
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
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*** *08/17/2018 / 3*
· ***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
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
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2