1. Product and company identification

Product identifier

Trade name: Plastic-Metal C Resin

Relevant identified uses of the substance or mixture and uses advised against

General use: Two-component epoxy resins, resin component
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: Weicon GmbH & Co. KG
Street/POB-No.: Königsberger Str. 255
Postal Code, city: 48157 Münster
Germany
WWW: www.weicon.de
E-mail: info@weicon.de
Telephone: +49 (0)251- 93 22-0
Telefax: +49 (0)251- 93 22-244
Dept. responsible for information:
Product-Safety-Department
Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

Emergency phone number

GIZ, Bonn (Germany)
Telephone: +49(0)228 / 19 240

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Form: pasty
Color: gray

Odor: slightly perceptible

Classification: Skin Irritation - Category 2; Eye Damage - Category 1; Sensitization - skin - Category 1; Aquatic toxicity - chronic - Category 2;

Hazard symbols:

Signal word: **Danger**

Hazard statements:
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Toxic to aquatic life with long lasting effects.

Precautionary statements: Keep out of reach of children.
Avoid breathing vapors/spray.
Wash hands and face thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection.
IF ON SKIN: Wash with plenty of water/soap.
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.
Specific treatment (see ' First aid ' on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Collect spillage.
Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Formulated bisphenol A-epoxy resin.

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 25068-38-6	Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)	13 - 30 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 28064-14-4	Reaction Product of Phenol-Formaldehyde Novolac and Epichlorohydrin	7 - 13 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 2425-79-8	1,4-bis(2,3-Epoxypropoxy) butane	3 - 7 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Acute Toxicity - inhalative - Category 4. Skin Irritation - Category 2. Eye Damage - Category 1. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 3.

Additional information: Product contains mineral fillers..

4. First aid measures

General information: First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse.

In case of inhalation: Move victim to fresh air, put at rest and loosen restrictive clothing. Immediately get medical attention.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Seek medical attention if irritation persists.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate transport to an eye specialist (continue rinsing during transport)

After swallowing: Do not induce vomiting. Rinse mouth with water. Let water be swallowed in little sips. Never give anything by mouth to an unconscious person.
Immediately get medical attention.

Most important symptoms/effects, acute and delayed

Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Vomiting, Headache, burns, Cough, respiratory complaints.

Information to physician

Symptoms of poisoning can only emerge after several hours; medical supervision is therefore essential for at least 48 hours.
Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:
249.8 °F

Auto-ignition temperature: not determined

Suitable extinguishing media:
Water fog, carbon dioxide, foam, dry chemical powder. Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons:
High power water jet.

Specific hazards arising from the chemical

Combustible. Hazardous vapors may form during fires.
In case of fire may be liberated: Metal oxide smoke, nitrogen oxides (NOx), aromatic hydrocarbons, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:
Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.
Do not inhale explosion and combustion gases.

Additional information: Cool endangered containers with water jetspray. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions: Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with the substance. Eliminate all ignition sources if safe to do so. Wear protective equipment. Wear respiratory protection when in the presence of vapor, dust, and aerosols. Keep unprotected people away.

Environmental precautions:
Do not allow to enter into ground-water, surface water or drains. Do not allow to enter into soil/subsoil.
In case of release, notify competent authorities.

Methods for clean-up: Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective equipment. Take off immediately all contaminated clothing and wash it before reuse. Handle and open container with care. When using do not eat, drink or smoke.

Precautions against fire and explosion:

Keep away from sources of ignition. - No smoking.
Usual measures for fire prevention.

Storage

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place. Keep container dry. Protect from heat and direct sunlight. Handle and open container with care. Keep only in original container. storage temperature: 35.6 °F up to 104 °F. Store containers in upright position.

Hints on joint storage: Keep away from food, drink and animal feedingstuffs.
Keep away from strong acids, strong bases and oxidizers.

8. Exposure controls / personal protection

Engineering controls

Provide adequate ventilation, and local exhaust as needed.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010

Skin protection: Wear suitable protective clothing.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material, Nitrile rubber.
Breakthrough time: < 480 min
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Use a breathing protection against vapors/aerosol.

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

If higher concentrations occur: Wear self-contained breathing apparatus.

General hygiene considerations:

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Avoid breathing vapors/spray. Avoid contact with skin and eyes.
Take off contaminated clothing and wash it before reuse.
When using do not eat, drink or smoke.
Wash hands before breaks and after work. Work place should be equipped with a shower and an eye rinsing apparatus.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Form: pasty
Color: gray

Odor:	slightly perceptible
Odor threshold:	not determined
pH value:	at 50%: 6 (Water)
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	> 392 °F
Flash point/flash point range:	249.8 °F
Evaporation rate:	no data available
Flammability:	not determined
Explosion limits:	LEL (Lower Explosion Limit): not determined UEL (Upper Explosive Limit): not determined
Vapor pressure:	at 68 °F: <= 0.2 Pa
Vapor density:	not determined
Density:	no data available
Water solubility:	at 68 °F: insoluble
Partition coefficient: n-octanol/water:	not determined
Auto-ignition temperature:	not determined
Thermal decomposition:	> 392 °F
Viscosity, dynamic:	at 77 °F: 70000 - 90000 mPa*s
Viscosity, kinematic:	not determined
Ignition temperature:	not applicable
Additional information:	Relative density 77 °F: 1.74 g/mL

10. Stability and reactivity

Reactivity: no data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions
Reacts with strong oxidizing agents, strong bases, and strong acids.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect against direct sunlight.
Protect from moisture contamination.

Incompatible materials: Strong oxidizing agents, strong acids, strong bases.

Hazardous decomposition products:
Hazardous vapors may form during fires.
In case of fire may be liberated: Metal oxide smoke, halogenated hydrocarbons, nitrogen oxides (NOx), aromatic hydrocarbons, carbon monoxide and carbon dioxide.

Thermal decomposition: > 392 °F

11. Toxicological information

Toxicological tests

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
Acute toxicity (oral): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 5000 mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 2000 mg/kg.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated): 10 mg/L < ATE <= 20 mg/L.

Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.
Information about 1,4-bis(2,3-Epoxypropoxy)butane:
Specific symptoms in animal studies (Rabbit): irritant (OECD 404)

Eye damage/irritation: Eye Damage - Category 1 = Causes serious eye damage.
Information about 1,4-bis(2,3-Epoxypropoxy)butane:
Specific symptoms in animal studies (Rabbit): Risk of serious damage to eyes. (OECD 405)

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin -
Category 1 = May cause an allergic skin reaction.
Information about 1,4-bis(2,3-Epoxypropoxy)butane:
Specific symptoms in animal studies (Rabbit): Substance in the local lymph node assay (Mouse): sensitising (OECD 429).

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700):
NOAEL Rat, oral (male): 15 mg/kg bw/d (OECD 453)

Reproductive toxicity: Lack of data.
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700):
NOAEL Rat, oral (female): 540 mg/kg bw/d (OECD 416).

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700):
Subchronic toxicity: NOAEL Rat, oral: 50 mg/kg/d

Aspiration hazard: Lack of data.

Other information:

Information about Reaction product with Bisphenol A-epichlorhydrin epoxy resin (molecular weight = 700):
LD50, oral, Rat (OECD 420): > 2000 mg/kg
LD50, dermal, Rabbit (OECD 402): > 2000 mg/kg
LC 0, inhalative, Rat (OECD 420): 0,00001 ppm

Information about 1,4-bis(2,3-Epoxypropoxy)butane:
LD50, oral, Rat (OECD 401): 1163 mg/kg
LD50, dermal, Rabbit (OECD 402): 1130 mg/kg

Symptoms

In case of ingestion:
Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
After contact with skin: Reddening
After eye contact: Causes tears, redness, pain.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Information about Reaction product with Bisphenol A-epichlorhydrin epoxy resin (molecular weight = 700): Algae toxicity:
EC50 Desmodesmus subspicatus (green algae): 9.4 mg/L/72h (EPA CFR).
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 1.7 mg/L/48h (OECD 202).
Fish toxicity:
LC50 Oncorhynchus mykiss: 1.2 mg/L/96h (OECD 203).
Bacterial toxicity:
IC50 Bacteria, Activated sludge: >100 mg/L/3 h.

Information about 1,4-bis(2,3-Epoxypropoxy)butane:
Algae toxicity:
EL50 Desmodesmus subspicatus (green algae): > 160 mg/L/72h
Daphnia toxicity: EC50 Daphnia magna: 75 mg/L/24h.

Mobility in soil

no data available

Persistence and degradability

Further details: Information about Reaction product with Bisphenol A-epichlorhydrin epoxy resin (molecular weight = 700):
Biodegradation: 5%/28d (OECD 301 F).
Product is biodegradable with difficulty.

Information about 1,4-bis(2,3-Epoxypropoxy)butane:
Biodegradation: 37%/ 28 d.
Product is not readily biodegradable.

Additional ecological information

Volatile organic compounds (VOC):
0 % by weight

General information: Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

Recommendation: Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

14. Transport information

USA: Department of Transportation (DOT)

Identification numbers:	UN3082
Proper shipping name:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product with Bisphenol A-epichlorhydrin epoxy resin (molecular weight = 700))
DOT hazard class or division:	9
PG:	III
Label codes:	9
Symbols:	G
Special provisions:	8, 146, 173, 335, IB3, T4, TP1, TP29
Packaging - Exceptions:	155
Packaging - Non-bulk:	203
Packaging - Bulk:	241
Quantity limitations - Passenger aircraft / rail:	No limit
Quantity limitations - Cargo only:	No limit
Vessel stowage - Location:	A

Sea transport (IMDG)

UN number:	UN 3082
Proper shipping name:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product with Bisphenol A-epichlorhydrin epoxy resin (molecular weight = 700))
IMDG:	Class 9, Subrisk -
Packing Group:	III
EmS:	F-A, S-F
Special provisions:	274, 335, 969
Limited quantities:	5 L
EQ:	E1
Contaminated packaging - Instructions:	P001, LP01
Contaminated packaging - Provisions:	PP1
IBC - Instructions:	IBC03
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T4
Tank instructions - Provisions:	TP2, TP29
Stowage and handling:	Category A.
Properties and observations:	-
Marine pollutant:	Yes
Segregation group:	none

Air transport (IATA)

UN/ID number:	UN 3082
Proper shipping name:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product with Bisphenol A-epichlorhydrin epoxy resin (molecular weight = 700))
ICAO/IATA:	Class 9
PG:	III
Hazard:	Miscellaneous
EQ:	E1
Passenger Ltd.Qty.:	Pack.Instr. Y964 - Max. Net Qty/Pkg. 30 kg G
Passenger:	Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L
Cargo:	Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L
Special Provisioning:	A97 A158 A197
ERG:	9L

15. Regulatory information

U.S. Federal Regulations

Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700):	TSCA Inventory: listed; EPA flags XU TSCA HPVC: not listed
Reaction Product of Phenol-Formaldehyde Novolac and Epichlorohydrin:	TSCA Inventory: listed; UVCB; EPA flags XU TSCA HPVC: not listed
1,4-bis(2,3-Epoxypropoxy)butane:	TSCA Inventory: listed; EPA flags T TSCA HPVC: not listed

National regulations - Great Britain

Hazchem-Code: •3Z

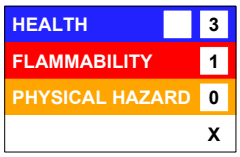
16. Other information

Text for labeling: Contains 13 - 30 % Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700), 7 - 13 % Reaction Product of Phenol-Formaldehyde Novolac and Epichlorohydrin, 3 - 7 % 1,4-bis(2,3-Epoxypropoxy)butane. Safety data sheet available on request.

Hazard rating systems:

NFPA Hazard Rating:
Health: 3 (Serious)
Fire: 1 (Slight)
Reactivity: 0 (Minimal)

HMIS Version III Rating:
Health: 3 (Serious)
Flammability: 1 (Slight)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor



Date of first version: Nov/6/2015

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.