



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Aug/5/2016

Version: 2

Language: en-US

Date of print: Aug/11/2016

Plastic-Metal Ceramic W Resin

Material number 104601

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1. Product and company identification

Product identifier

Trade name: Plastic-Metal Ceramic W Resin

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

General use: Resin for 2 component adhesive (epoxy resin).
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: WEICON Inc.
Street/POB-No.: 20 Steckle Place, Unit 20
Postal Code, city: Kitchener, Ontario N2E 2C3, CA
WWW: www.weicon.ca
E-mail: info@weicon.ca
Telephone: +1-519-896-5252
Telefax: +1-519-896-5254
Dept. responsible for information:
Product-Safety-Department
Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

Emergency phone number

EMERGENCY CONTACT – USA (24h): Tel: ++1 202 464 2554

Transport:

TRANSPORT EMERGENCY CONTACT - USA (24h): Tel: ++1 202 464 2554

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: solid
Color: white
Odor: characteristic
Classification: Acute Toxicity - dermal - Category 4; Acute Toxicity - inhalative - Category 4;
Skin Irritation - Category 2; Eye Irritation - Category 2A; Sensitization - skin -
Category 1; Aquatic toxicity - chronic - Category 2;

Hazard symbols:



Signal word:

Warning

Hazard statements: Harmful in contact with skin.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
Toxic to aquatic life with long lasting effects.



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Precautionary statements: Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wash hands and face thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 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 INHALED: Remove person to fresh air and keep comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Call a POISON CENTER/doctor if you feel unwell.
 Specific treatment (see First aid on this label).
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Take off contaminated clothing.
 Wash contaminated clothing 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: Resin for 2 component adhesive (epoxy resin).

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 25068-38-6	Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)	35 - 50 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 13463-67-7	Titanium dioxide	1 - 5 %	not applicable
CAS 2425-79-8	1,4-bis(2,3-Epoxypropoxy) butane	1 - 3 %	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.

4. First aid measures

General information: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash contaminated clothing before reuse.

In case of inhalation: Remove the casualty into fresh air and keep him calm. Provide fresh air. Immediately get medical attention.



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- Following skin contact: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Wash contaminated clothing before reuse. Consult a doctor if skin 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. Subsequently consult an ophthalmologist.
- After swallowing: Do not induce vomiting. Rinse mouth with water. Let water be swallowed in little sips. Immediately get medical attention.

Most important symptoms/effects, acute and delayed

Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. Respiratory complaints, vomiting, drowsiness.

Information to physician

Treat symptomatically.

5. Fire fighting measures

- Flash point/flash point range: not applicable
- Auto-ignition temperature: not determined
- Suitable extinguishing media: Alcohol resistant foam, dry chemical powder, water spray jet, carbon dioxide.
- Extinguishing media which must not be used for safety reasons: High power water jet

Specific hazards arising from the chemical

Hazardous vapors may form during fires. In case of fire may be liberated: Metallic oxides, halogenated compounds, carbon monoxide and carbon dioxide.

- Protective equipment and precautions for firefighters: Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing. In case of fire and/or explosion do not breathe fumes.
- Additional information: Cool endangered containers with water jetspray. You have to dispose of contaminated extinguishing water according to the regulations of the authorities. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

- Personal precautions: Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection. Avoid generation of dust. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away. Avoid contact with skin and eyes.
- Environmental precautions: Do not allow to enter into ground-water, surface water or drains. Do not allow to enter into soil/subsoil. If necessary notify appropriate authorities.
- Methods for clean-up: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.



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7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. In case of inadequate ventilation wear respiratory protection. Avoid generation of dust.
Wear appropriate protective equipment. 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.

Precautions against fire and explosion:

Take care of general rules for industrial preventive fire protection.

Storage

Requirements for storerooms and containers:

Keep only in the original container. Protect from heat and direct sunlight. Store in a dry place.

Keep container tightly closed in a cool, well-ventilated place.

Recommended storage temperature: 5-35 °C. Do not re-use the empty container.

Hints on joint storage:

Keep away from strong acids, strong alkalis and strong oxidizing agents.

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
13463-67-7	Titanium dioxide	USA: ACGIH: TWA	10 mg/m ³
		USA: OSHA: TWA	15 mg/m ³

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.

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: natural latex - Layer thickness: 0.6 mm

Breakthrough time: > 480 min

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:

Avoid contact with skin and eyes. Eye wash facility must be provided.

Take off immediately all contaminated clothing and wash it before reuse.

When using do not eat, drink or smoke. Wash hands before breaks and after work.



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9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F and 101.3 kPa: solid Color: white
Odor:	characteristic
Odor threshold:	not determined
pH value:	not determined
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	not determined
Flash point/flash point range:	not applicable
Evaporation rate:	No data available
Flammability:	not determined
Explosion limits:	LEL (Lower Explosion Limit): not determined UEL (Upper Explosive Limit): not determined
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F: 1.64 g/cm ³
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	2.64 - 3.78 log P(o/w) (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
Auto-ignition temperature:	not determined
Thermal decomposition:	No decomposition when used properly.
Viscosity, dynamic:	not determined
Ignition temperature:	not determined

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	Reacts with strong acids, strong alkalis, and strong oxidizing agents.
Conditions to avoid:	Protect from heat and direct sunlight.
Incompatible materials:	Strong acids, alkalis and strong oxidizing agents
Hazardous decomposition products:	In case of fire may be liberated: Metallic oxides, halogenated compounds, carbon monoxide and carbon dioxide.
Thermal decomposition:	No decomposition when used properly.



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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): Lack of data.
Acute toxicity (dermal): Acute Toxicity - dermal - Category 4 = Harmful in contact with skin.
ATEmix calculated: 1644.4 mg/kg
Acute toxicity (inhalative): Acute Toxicity - inhalative - Category 4 = Harmful if inhaled.
ATEmix calculated (Vapors): 16.01 mg/L
Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.
Eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
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.
Aspiration hazard: Lack of data.

Other information: Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700):
LD50, oral, Rat (OECD 420): >2000 mg/kg
LD50, dermal, Rabbit (OECD 402): >2000 mg/kg
Information about 1,4-bis(2,3-Epoxypropoxy)butane:
LD50, oral, Rat (OECD 420): 1882 mg/kg
LD50, dermal, Rat (OECD 402): >2000 mg/kg
LD50, dermal, Rabbit (OECD 402): 1130 mg/kg
Information about Titanium dioxide:
LD50 Rat, oral: > 5000 mg/kg
LC50 Rat, inhalative: > 6,8 mg/L/4h
NOAEL Rat, chronic oral toxicity: 3500 mg/kg
NOAEC Rat, chronic inhalation toxicity: 10 mg/m³
For carcinogenic effects:
IARC Rating: Group 2B
OSHA Carcinogen: not listed
NTP Rating: not listed

Symptoms

Respiratory complaints, vomiting, drowsiness. Leads to irritation of the mucous membranes.
Prolonged/repetitive skin contact may cause skin defatting or dermatitis.
May cause sensitization by skin contact.



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12. Ecological information

Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700):
Fish toxicity:
LC50 Oncorhynchus mykiss: 2 mg/L/96h.
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 1.8 mg/L/48h (OECD 202).
NOEC Daphnia magna (Big water flea): 0.3 mg/L/21d (OECD 211).
Algae toxicity:
EC50 Scenedesmus capricornutum: 220 mg/L/72h.
Information about Titanium dioxide:
Bacterial toxicity:
EC50 Pseudomonas fluorescens: > 5000 mg/L/24 h,
Fish toxicity:
LC50 fish, freshwater: 1000 mg/L.
LC50 fish, marine water: 10000 mg/L.
Algae toxicity:
EC50/LC50 algae, freshwater: 61 mg/L.
EC50/LC50 algae, marine water: 10000 mg/L.
EC10/LC10 or NOEC algae, freshwater: 12,7 mg/L.
EC10/LC10 or NOEC algae, marine water: 5600 mg/L.

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

AOX reference: The product contains organically bound halogen. Thus it may add to the AOX value.
Volatile organic compounds (VOC):
0 % by weight = 0 g/L
General information: Do not allow to penetrate into soil, waterbodies or drains. Do not allow uncontrolled discharge of product into the environment.

13. Disposal considerations

Product

Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging

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



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14. Transport information

USA: Department of Transportation (DOT)

Identification number: UN3077
Proper shipping name: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.
Hazard class or Division: 9
Packing Group: III
Labels: 9
Special provisions: 8, 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33
Packaging – Exceptions: 155
Packaging – Non-bulk: 213
Packaging – Bulk: 240
Quantity limitations – Passenger aircraft / rail: No limit
Quantity limitations – Cargo only: No limit
Vessel stowage – Location: A



Sea transport (IMDG)

UN number: UN 3077
Proper shipping name: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700))
Class or division, Subsidiary risk: Class 9, Subrisk-
Packing Group: III
EmS: F-A, S-F
Special provisions: 274, 335, 966, 967, 969
Limited quantities: 5 kg
Excepted quantities: E1
Contaminated packaging - Instructions: P002, LP02
Contaminated packaging - Provisions: PP12
IBC - Instructions: IBC08
IBC - Provisions: B3
Tank instructions - IMO: -
Tank instructions - UN: T1, BK2, BK2, BK3
Tank instructions - Provisions: TP33
Stowage and handling: Category A. SW23
Properties and observations: -
Marine pollutant: yes
Segregation group: none

Air transport (IATA)

UN/ID number: UN 3077
Proper shipping name: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700))
Class or division, Subsidiary risk: Class 9
Packing Group: III
Hazard label: Miscellaneous
Excepted Quantity Code: E1
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y956 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft: Pack.Instr. 956 - Max. Net Qty/Pkg. 400 kg
Cargo Aircraft only: Pack.Instr. 956 - Max. Net Qty/Pkg. 400 kg
Special provisions: A97 A158 A179 A197
Emergency Response Guide-Code (ERG): 9L



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15. Regulatory information

National regulations - U.S. Federal Regulations

Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin
(number average molecular weight <=700):

Titanium dioxide:

TSCA Inventory: listed; EPA flags XU

TSCA HPVC: not listed

TSCA Inventory: listed

TSCA HPVC: not listed

Carcinogen Status:

IARC Rating: Group 2B

OSHA Carcinogen: not listed

NTP Rating: not listed

NIOSH Recommendations:

Occupational Health Guideline:
0617

1,4-bis(2,3-Epoxypropoxy)butane:

TSCA Inventory: listed; EPA flags T

TSCA HPVC: not listed

National regulations - U.S. State Regulations

Titanium dioxide:

California Proposition 65: cancer

Rhode Island HSL: listed

National regulations - Great Britain

Hazchem-Code: 2Z

16. Other information

Text for labeling: Contains 35 - 50 % Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin
(number average molecular weight <=700), 1 - 5 % Titanium dioxide, 1 - 3 %
1,4-bis(2,3-Epoxypropoxy)butane. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 2 (Moderate)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Reason of change: Changes in section 1: General revision

Date of first version: Feb/24/2016

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.