1. Product and company identification

Product identifier

Trade name: Plastic-Metal HB 300 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 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 – Canada (24h): Tel: ++1 866 928 0789 (Toll free)

Transport:
TRANSPORT EMERGENCY CONTACT - Canada (24h): Tel: ++1 866 928 0789 (Toll free)

2. Hazards identification

Emergency overview

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Form: viscous
Color: gray

Odor: characteristic

Classification: Skin Irritation 2; Eye Irritation 2A; Sensitization - skin 1; Carcinogenicity 2; Aquatic toxicity - chronic 2;

Hazard symbols:

Signal word: **Warning**

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

Precautionary statements: Keep out of reach of children.
Obtain special instructions before use.
Avoid breathing dust/fume/gas/mist/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.
IF exposed or concerned: Get medical advice/attention.
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.
Collect spillage.
Store locked up.
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 characterisation: Formulated bisphenol A-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)	20 - 60 %	Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 2.
CAS 28064-14-4	Bisphenol F Epoxy Resin	1 - 25 %	Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 2.
CAS 7440-02-0	Nickel	0.1 - 0.5 %	Sensitization - skin 1. Carcinogenicity 2. Specific Target Organ Toxicity (Repeated Exposure) 1.

4. First aid measures

General information: 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. Keep airway open. Seek medical aid in case of troubles.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Take off immediately all contaminated clothing and wash it before reuse.
In case of skin reactions, consult a physician.

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. Aspiration hazard: in case of swallowing or vomiting danger of penetration into the lungs.
Rinse mouth immediately and drink plenty of water.
Never give anything by mouth to an unconscious person.
Immediately get medical attention.

Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Vomiting, respiratory complaints, visual disorders, nausea.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:
> 100 °C

Auto-ignition temperature: not determined

Suitable extinguishing media::
Water fog, carbon dioxide, foam, extinguishing powder.

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: Metal oxide smoke, carbon black, nitrogen oxides (NOx), 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. Do not breathe fume/gas/mist/vapors/spray. Avoid contact with the substance. Eliminate all ignition sources if safe to do so. Wear appropriate protective equipment. Wear respiratory protection when in the presence of vapor, dust, and aerosols. Keep unprotected people away. Take off immediately all contaminated clothing and wash it before reuse.

Environmental precautions:
Do not allow to enter into ground-water, surface water or drains. 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). Collect dry and place in appropriate containers for disposal. Subsequent cleaning.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.
If necessary: Execute works under fume hood.
Avoid the formation of aerosol.
Do not breathe fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Handle and open container with care. Wear protective equipment.
Take off immediately all contaminated clothing and wash it before reuse.
Obtain special instructions before use.

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. Store containers in upright position.

Hints on joint storage: Keep away from food, drink and animal feedingstuffs.
Do not store together with acids, oxidizing agents or alkalis.

Further details: Store locked up.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7440-02-0	Nickel	Canada, Alberta: OEL 8 hour	1.5 mg/m³ metal
		Canada, BC: OEL TWA	0.05 mg/m³
		Canada, Ontario: OEL TWA	1 mg/m³ inhalable fraction (Metal)
		Canada, Québec: VEMP	1 mg/m³ (Métal)
		USA: ACGIH: TWA	0.1 mg/m³ (compounds, soluble; inhalable fraction)
		USA: ACGIH: TWA	0.2 mg/m³ (compounds, insoluble; inhalable fraction)
		USA: ACGIH: TWA	1.5 mg/m³ (metal, inhalable fraction)
		USA: NIOSH: TWA	0.015 mg/m³
		USA: OSHA: TWA	1 mg/m³ (Nickel and compounds)

Engineering controls

Provide adequate ventilation.
If necessary: Execute works under fume hood.
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.
Layer thickness: 0.4 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.

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

General hygiene considerations:

Keep away from sources of ignition - No smoking.
Avoid contact with skin and eyes.
Take off immediately all contaminated clothing.
Do not breathe fume/gas/mist/vapors/spray.
Wash hands before breaks and after work.
Safety shower and eye wash station should be easily accessible to the work area.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Form: viscous Color: gray
Odor:	characteristic
Odor threshold:	No data available
pH value:	not determined
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	not determined
Flash point/flash point range:	> 100 °C
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	not determined
Vapor density:	No data available
Density:	at 20 °C: 2.2 - 2.3 g/cm³
Water solubility:	immiscible
Partition coefficient: n-octanol/water:	not determined
Auto-ignition temperature:	not determined
Thermal decomposition:	No data available
Viscosity, dynamic:	at 25 °C: 240000 mPa*s
Viscosity, kinematic:	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 Alkali (lye), acids, oxidizing agents

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

Incompatible materials: Alkali (lye), acids, Oxidising agent, amines

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

Thermal decomposition: No data available

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): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.

Eye damage/irritation: Eye Irritation 2A = Causes serious eye irritation.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin 1 = May cause an allergic skin reaction.
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700):
Specific symptoms in animal studies (guinea pig): sensitising (OECD 406)

Germ cell mutagenicity/Genotoxicity: Lack of data.
In vitro mutagenicity:
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700): negative (OECD 474)

Carcinogenicity: Carcinogenicity 2 = Suspected of causing cancer.

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):
Acute oral toxicity: LD50, Rat: > 2000 mg/kg
Acute dermal toxicity: LD50, Rabbit: > 2000 mg/kg

For carcinogenic effects:
Information about Nickel:
IARC Rating: Group 2B
OSHA Carcinogen: not listed
NTP Rating: not listed

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):
Algae toxicity:
EC50 Scenedesmus capricornutum: 9.4 mg/L/72h.
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 1.1-3.8 mg/L/48h (OECD 202).
NOEC Daphnia magna (Big water flea): 0.3 mg/L/21d (OECD 211).
Fish toxicity:
LC50 Oncorhynchus mykiss: 1.2 mg/L/96h.

Further details: Biodegradation:
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700): 12% (OECD 301 B).
Product is not readily biodegradable.

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):
0 % by weight

General information: Danger to drinking water when soaking into the soil or waters.

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

13. Disposal considerations

Product

Recommendation: Special waste. Incinerate according to applicable local, state and federal regulations.

Contaminated packaging

Recommendation: Non-contaminated packages may be recycled.
Handle contaminated packages in the same way as the substance itself.

14. Transport information

USA: Department of Transportation (DOT)

Identification number:	UN3082
Proper shipping name:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin.)
Hazard class or Division:	9
Packing Group:	III
Labels:	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

Canada: Transportation of Dangerous Goods (TDG)

UN Number:	UN3082
Shipping name:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin.)
TDG class:	9
Packing group:	III
Special provisions:	16, 99
Explosive limit and limited quantity index:	5 L

Sea transport (IMDG)

UN number:	UN 3082
Proper shipping name:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin.)
Class or division, Subsidary risk:	Class 9, Subrisk-
Packing Group:	III
EmS:	F-A, S-F
Special provisions:	274, 335, 969
Limited quantities:	5 L
Excepted quantities:	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. (epoxy resin.)
Class or division, Subsidary risk:	Class 9
Packing Group:	III
Hazard label:	Miscellaneous
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y964 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft:	Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L
Cargo Aircraft only:	Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L
Special provisions:	A97 A158 A197
Emergency Response Guide-Code (ERG):	9L

15. Regulatory information

National regulations - Canada

No data available

National regulations - 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
Bisphenol F Epoxy Resin:	TSCA Inventory: listed; UVCB; EPA flags XU TSCA HPVC: not listed
Nickel:	TSCA Inventory: listed TSCA HPVC: not listed Carcinogen Status: IARC Rating: Group 2B OSHA Carcinogen: not listed NTP Rating: listed Clean Water Act: Priority Pollutant: yes Other Environmental Laws: CERCLA: RQ 100* lbs. RCRA Groundwater Monitoring: Methods 6010, 7520 / PQL 50, 400 SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold Standard NIOSH Recommendations: Occupational Health Guideline: 0445*

National regulations - U.S. State Regulations

Nickel:	California Proposition 65: cancer Rhode Island HSL: listed

16. Other information

Text for labeling:	Contains 20 - 60 % Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700), 1 - 25 % Bisphenol F Epoxy Resin, 0.1 - 0.5 % Nickel. 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) - Chronic effects
Flammability: 1 (Slight)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0
		X

Reason of change: ADR/RID 2017
Date of first version: 24/Feb/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.