



# 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 HB 300 Hardener

Material number 104502

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### 1. Product and company identification

#### Product identifier

Trade name: Plastic-Metal HB 300 Hardener

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

General use: Two-component epoxy resins, hardener 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 – USA (24h): Tel: ++1 202 464 2554**

**Transport:**

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

### 2. Hazards identification

#### Emergency overview

Appearance: Form: pasty  
Color: dark gray  
Odor: characteristic  
Classification: Skin Irritation - Category 2; Eye Damage - Category 1; Sensitization - skin - Category 1; Carcinogenicity - Category 2;  
Specific Target Organ Toxicity (Repeated Exposure) - Category 1;  
Aquatic toxicity - chronic - Category 3;

Hazard symbols:



Signal word:

#### **Danger**

Hazard statements:

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Suspected of causing cancer.  
Causes damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.



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Precautionary statements: Keep out of reach of children.  
 Obtain special instructions before use.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wash hands and face thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 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.  
 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.  
 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

May be harmful if swallowed. May be harmful in contact with skin.  
see section 11: Toxicological information

## 3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 68410-23-1	Fatty acids, C18-unsaturated, dimers, reaction products with polyethylenpolyamines	1 - 25 %	Skin Irritation - Category 2. Eye Damage - Category 1. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 7440-02-0	Nickel	1 - 25 %	Sensitization - skin - Category 1. Carcinogenicity - Category 2. Specific Target Organ Toxicity (Repeated Exposure) - Category 1.
CAS 90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	< 5 %	Acute Toxicity - dermal - Category 4. Skin Corrosion - Category 1B. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 3.
CAS 140-31-8	2-Piperazin-1-ylethylamine	< 1 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 3. Skin Corrosion - Category 1B. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 3.
CAS 61788-44-1	phenol, styrenated	< 1 %	Skin Irritation - Category 2. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.

Additional information: Total caustic substance(s): < 5%



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### 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. Keep airway open. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical attention.
- 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.  
Rinse mouth immediately and drink plenty of water.  
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 damage to organs through prolonged or repeated exposure. Causes skin irritation. May cause an allergic skin reaction. Shortage of breath, Cough.

#### Information to physician

Treat symptomatically.

### 5. Fire fighting measures

- Flash point/flash point range: No data available
- Auto-ignition temperature: No data available
- Suitable extinguishing media: Water fog, dry chemical powder, foam, 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: Metal oxide smoke, Nitrogen oxides (NO<sub>x</sub>), 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. 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. Avoid exposure.



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### 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. Contact experts.

## 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 the substance. 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. Do not use in confined spaces.

Avoid exposure - 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. Store containers in upright position.

Protect from heat and direct sunlight. Handle and open container with care.

Keep only in original packaging.

#### Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

Keep away from: Acids, oxidizing agents, metals

#### 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	USA: ACGIH: TWA	0.1 mg/m <sup>3</sup>
			(compounds, soluble; inhalable fraction)
		USA: ACGIH: TWA	0.2 mg/m <sup>3</sup>
			(compounds, insoluble; inhalable fraction)
		USA: ACGIH: TWA	1.5 mg/m <sup>3</sup> (metal, inhalable fraction)
	USA: NIOSH: TWA	0.015 mg/m <sup>3</sup>	
	USA: OSHA: TWA	1 mg/m <sup>3</sup> (Nickel and compounds)	

### Engineering controls

Provide adequate ventilation.

If necessary: Execute works under fume hood.

See also information in chapter 7, section storage.



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### 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, 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:  
Avoid contact with skin and eyes.  
Take off immediately all contaminated clothing and wash it before reuse.  
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.  
Avoid exposure - obtain special instructions before use.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Form: pasty Color: dark gray
Odor:	characteristic
Odor threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F: 2.3 - 2.5 g/cm <sup>3</sup>
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available

## 10. Stability and reactivity

- Reactivity: No data available
- Chemical stability: Stable under recommended storage conditions.
- Possibility of hazardous reactions  
No hazardous reaction when handled and stored according to provisions.



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- Conditions to avoid: Keep away from heat sources, sparks and open flames.  
Protect against direct sunlight.
- Incompatible materials: Acids, oxidizing agents, metals
- Hazardous decomposition products:  
Hazardous vapors may form during fires.  
In case of fire may be liberated: Metal oxide smoke, Nitrogen oxides (NO<sub>x</sub>), 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): Based on available data, the classification criteria are not met.  
ATEmix (calculated): > 2000 mg/kg.
- Acute toxicity (dermal): Based on available data, the classification criteria are not met.  
ATEmix (calculated): > 2000 mg/kg.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.
- Eye damage/irritation: Eye Damage - Category 1 = Causes serious eye damage.
- 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: Carcinogenicity - Category 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): Specific Target Organ Toxicity (Repeated Exposure) -  
Category 1 = Causes damage to organs through prolonged or repeated exposure.
- Aspiration hazard: Lack of data.



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Other information: Information about Fatty acids, C18-unsaturated, dimers, reaction products with polyethylenpolyamines:  
LD50 Rat, dermal: > 2000 mg/kg  
Information about Amines, polyethylenepoly-, triethylenetetramine fraction:  
LD50 Rat, oral: 1716 mg/kg (OECD 401).  
LD50 Rabbit, dermal: 1465 mg/kg  
Information about 2-Piperazin-1-ylethylamine:  
LD50 Rat, oral: > 1470 mg/kg  
LD50 Rabbit, dermal: 866 mg/kg  
Information about phenol, styrenated:  
LD50 Rat, oral: > 2001 mg/kg  
LD50 Rat, dermal: > 2000 mg/kg  
Information about Nickel:  
LD50 Rat, oral: > 2001 mg/kg  
LDL0 Rat, oral: 5 mg/kg  
For carcinogenic effects:  
Information about Nickel:  
LD50 Rat, intraperitoneal: 250 mg/kg  
IARC Rating: Group 2B  
OSHA Carcinogen: not listed  
NTP Rating: not listed

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.  
Information about Fatty acids, C18-unsaturated, dimers, reaction products with polyethylenpolyamines:  
Algae toxicity:  
IC50 Pseudokirchneriella subcapitata (green algae): 4.11 mg/l/72h (OECD 201)  
Daphnia toxicity:  
EC50 Daphnia magna (Big water flea): 5.18 mg/L/48h (OECD 202)  
Fish toxicity:  
LC50 Leuciscus idus: 7.07 mg/l/96h (OECD 203)  
Information about Phenol, styrenated:  
Algae toxicity:  
EL50 Pseudokirchneriella subcapitata (green algae): > 10 mg/l/72h (OECD 201)  
Daphnia toxicity:  
EC50 Daphnia magna (Big water flea): 4.6 mg/L/48h (OECD 202)  
Fish toxicity:  
LL50 Leuciscus idus: 14.8 mg/l/96h (OECD 203)  
Information about 2-Piperazin-1-ylethylamine:  
Algae toxicity:  
EC50 Selenastrum capricornutum: 494 mg/l/48 h.  
Daphnia toxicity:  
EC50 Daphnia magna (Big water flea): 32 mg/l/48 h.  
Information about Nickel:  
Algae toxicity:  
EC50 Selenastrum capricornutum: 0.18 mg/l/72 h (OECD 201).  
Daphnia toxicity:  
EC50 Daphnia magna (Big water flea): > 100 mg/l/48 h.  
Fish toxicity:  
LC50 Brachydanio rerio (zebra-fish): > 100 mg/l/96 h.



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Further details: Biodegradation:  
Information about Fatty acids, C18-unsaturated, dimers, reaction products with polyethylenpolyamines:  
20 %/28 d (OECD 301 B). Product is not readily biodegradable.  
Information about 2-Piperazin-1-ylethylamine: 0 %/28 d (OECD 301 D). Product is not biodegradable.  
Information about Phenol, styrenated:  
0 - 7 %/28 d (OECD 301 C). Product is not biodegradable.

### Mobility in soil

No data available

### Persistence and degradability

Further details: No data available

### Additional ecological information

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: UN3259  
Proper shipping name: UN 3259, Amines, solid, corrosive, n.o.s.  
(Amines, polyethylenepoly-, triethylenetetramine fraction)  
Hazard class or Division: 8  
Packing Group: III  
Labels: 8  
Symbols: G  
Special provisions: IB8, IP3, T1, TP33  
Packaging – Exceptions: 154  
Packaging – Non-bulk: 213  
Packaging – Bulk: 240  
Quantity limitations – Passenger aircraft / rail: 25 kg  
Quantity limitations – Cargo only: 100 kg  
Vessel stowage – Location: A  
Vessel stowage – Other: 52







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### Sea transport (IMDG)

UN number: UN 3259  
Proper shipping name: UN 3259, AMINES, SOLID, CORROSIVE, N.O.S.  
(Amines, polyethylenepoly-, triethylenetetramine fraction)  
Class or division, Subsidiary risk: Class 8, Subrisk-  
Packing Group: III  
EmS: F-A, S-B  
Special provisions: 223, 274  
Limited quantities: 5 kg  
Excepted quantities: E1  
Contaminated packaging - Instructions: P002, LP02  
Contaminated packaging - Provisions: -  
IBC - Instructions: IBC08  
IBC - Provisions: B3  
Tank instructions - IMO: -  
Tank instructions - UN: T3  
Tank instructions - Provisions: TP33  
Stowage and handling: Category A.  
Segregation: SG35  
Properties and observations: Colourless to yellowish solids with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Causes burns to skin, eyes and mucous membranes. React violently with acids.  
Marine pollutant: no  
Segregation group: 18

### Air transport (IATA)

UN/ID number: UN 3259  
Proper shipping name: UN 3259, AMINES, SOLID, CORROSIVE, N.O.S.  
(Amines, polyethylenepoly-, triethylenetetramine fraction)  
Class or division, Subsidiary risk: Class 8  
Packing Group: III  
Hazard label: Corrosive  
Excepted Quantity Code: E1  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y845 - Max. Net Qty/Pkg. 5 kg  
Passenger and Cargo Aircraft: Pack.Instr. 860 - Max. Net Qty/Pkg. 25 kg  
Cargo Aircraft only: Pack.Instr. 864 - Max. Net Qty/Pkg. 100 kg  
Special provisions: A3 A803  
Emergency Response Guide-Code (ERG): 8L



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### 15. Regulatory information

#### National regulations - U.S. Federal Regulations

Fatty acids, C18-unsaturated, dimers, reaction products with polyethylenpolyamines:

Nickel:

TSCA Inventory: listed; UVCB

TSCA HPVC: not listed

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\*

Amines, polyethylenepoly-, triethylenetetramine fraction:

2-Piperazin-1-ylethylamine:

phenol, styrenated:

TSCA Inventory: listed

TSCA HPVC: not listed

TSCA Inventory: listed

TSCA HPVC: not listed

TSCA Inventory: listed

TSCA HPVC: not listed

#### National regulations - U.S. State Regulations

Nickel:

Amines, polyethylenepoly-, triethylenetetramine fraction:

California Proposition 65: cancer

Rhode Island HSL: listed

California Proposition 65 code: -

Massachusetts Haz. Substance codes: 6

Pennsylvania Haz. Substance code: -

#### National regulations - Great Britain

Hazchem-Code: 2X

### 16. Other information

Text for labeling:

Contains 1 - 25 % Fatty acids, C18-unsaturated, dimers, reaction products with polyethylenpolyamines, 1 - 25 % Nickel, < 5 % Amines, polyethylenepoly-, triethylenetetramine fraction, < 1 % 2-Piperazin-1-ylethylamine, < 1 % phenol, styrenated. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 1 (Slight)

Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 3 (Serious) - Chronic effects

Flammability: 1 (Slight)

Physical Hazard: 1 (Slight)

Personal Protection: X = Consult your supervisor

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		1
		X

Reason of change:

Changes in section 1: General revision

Date of first version:

Feb/19/2016



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### 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.