

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

Revision date: Mar/4/2016 Version: 1 Language: en-US Date of print: Mar/7/2016

# Plastic-Metal HB 300 Hardener

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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

Additional information: WEICON GmbH & Co. KG

Königsberger Straße 255

Münster 48157 www.weicon.de info@weicon.de +49(0)251 / 9322 - 0 +49(0)251 / 9322 - 244

## **Emergency phone number**

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

## 2. Hazards identification

#### **Emergency overview**

Appearance: Form: pasty

Color: dark gray 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:

Odor:







Signal word: Danger



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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.

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



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# 3. Composition / Information on ingredients

Hazardous 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%

## 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.



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# 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 (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. Wear 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.

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.



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#### **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 container.

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	Туре	Limit value
7440-02-0	Nickel	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/m <sup>3</sup>
		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, 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.



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# 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 No data available Vapor density:

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.

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 (NOx), carbon

monoxide and carbon dioxide.

Thermal decomposition: No data available



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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): 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.

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



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# 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.

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.



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# 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 numbers: UN3259

Proper shipping name: UN 3259, Amines, solid, corrosive, n.o.s.

(Amines, polyethylenepoly-, triethylenetetramine fraction)

DOT hazard class or division: 8
PG: III
Label codes: 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

#### Sea transport (IMDG)

UN number: UN 3259

Proper shipping name: UN 3259, AMINES, SOLID, CORROSIVE, N.O.S.

(Amines, polyethylenepoly-, triethylenetetramine fraction)

IMDG: Class 8, Subrisk -

Packing Group:

EmS:
F-A, S-B
Special provisions:
223, 274
Limited quantities:
5 kg
EQ:
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

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Air transport (IATA)

UN/ID number: UN 3259

UN 3259, AMINES, SOLID, CORROSIVE, N.O.S. Proper shipping name:

(Amines, polyethylenepoly-, triethylenetetramine fraction)

ICAO/IATA: Class 8 PG: Ш Corrosive Hazard:

E1 EQ:

Passenger Ltd.Qty.: Pack.Instr. Y845 - Max. Net Qty/Pkg. 5 kg Pack.Instr. 860 - Max. Net Qty/Pkg. 25 kg Passenger: Pack.Instr. 864 - Max. Net Qty/Pkg. 100 kg Cargo:

Special Provisioning: A3 A803 ERG: 8L

# 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\*

TSCA Inventory: listed TSCA HPVC: not listed TSCA Inventory: listed TSCA HPVC: not listed TSCA Inventory: listed TSCA HPVC: not listed

Amines, polyethylenepoly-, triethylenetetramine fraction:

2-Piperazin-1-ylethylamine:

phenol, styrenated:

## National regulations - U.S. State Regulations

Nickel:

Amines, polyethylenepoly-, triethylenetetramine

fraction:

**National regulations - Great Britain** 

Hazchem-Code: 2X California Proposition 65: cancer

Rhode Island HSL: listed

California Proposition 65 code: -

Massachusetts Haz. Substance codes: 6 Pennsylvania Haz. Substance code: -



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## 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:

3 1

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

Date of first version: Feb/19/2016

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.

