



SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010

Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

WEICON ST Hardener

Material number 104102

Page: 1 of 10

1. Product and company identification

Product identifier

Trade name: WEICON ST Hardener

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

General use: Hardener 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 – 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: Form: pasty
Color: light gray
Odor: unpleasant
Classification: Skin Corrosion 1B; Sensitization - skin 1; Aquatic toxicity - chronic 2;
Hazard symbols:



Signal word: **Danger**
Hazard statements: Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.



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WEICON ST Hardener

Material number 104102

Page: 2 of 10

Precautionary statements: Do not breathe 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/face protection.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.
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.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Collect spillage.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulation.

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: Mixture of the substances listed below with non-hazardous additions



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according to WHMIS 2015 and ANSI Z400.1-2010

WEICON ST Hardener

Material number 104102

Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

Page:

3 of 10

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 90-72-2	2,4,6-tris(Dimethylaminomethyl)phenol	1 - 25 %	Acute Toxicity 4 (oral). Skin Irritation 2. Eye Irritation 2A.
CAS 68131-73-7	Amines, polyethylenepoly-	1 - 25 %	Acute Toxicity 4 (oral). Acute Toxicity 4 (dermal). Skin Corrosion 1B. Sensitization - skin 1. Aquatic toxicity - acute 1. Aquatic toxicity - chronic 1.
CAS 4067-16-7	Pentaethylenehexamine	1 - 25 %	Skin Corrosion 1B. Sensitization - skin 1. Aquatic toxicity - acute 1. Aquatic toxicity - chronic 1.
CAS 157707-73-8	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear, tetraethylenepentamine and triethylenetetramine	1 - 25 %	Skin Irritation 2. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 2.
CAS 68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	1 - 25 %	Skin Irritation 2. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 2.
CAS 112-57-2	3,6,9-Triazaundecamethylenediamine	< 1 %	Acute Toxicity 4 (oral). Acute Toxicity 4 (dermal). Skin Corrosion 1B. Sensitization - skin 1. Aquatic toxicity - chronic 2.

4. First aid measures

General information:	First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand. Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash contaminated clothing before reuse.
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. 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. Subsequently seek the immediate attention of an ophthalmologist.
After swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.



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WEICON ST Hardener

Material number 104102

Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

Page: 4 of 10

Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. May cause an allergic skin reaction.
Respiratory complaints, vomiting.

Information to physician

Treat symptomatically. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

5. Fire fighting measures

Flash point/flash point range:

> 100 °C

Auto-ignition temperature: not applicable

Suitable extinguishing media:

Alcohol resistant foam, extinguishing powder, water spray jet, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

May form dangerous gases and vapours in case of fire.
Furthermore, there may develop: nitrogen oxides (NO_x), 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 exposed containers with water spray.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow water used to extinguish fire to enter drains, ground or waterways.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6. Accidental release measures

Personal precautions:

Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with the substance.
If possible, eliminate leakage. Provide adequate ventilation.
Wear appropriate protective equipment. Keep away ignition sources. 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. 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.

7. Handling and storage

Handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.

When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Take care of general rules for industrial preventive fire protection.



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according to WHMIS 2015 and ANSI Z400.1-2010

WEICON ST Hardener

Material number 104102

Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

Page: 5 of 10

Storage

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position.

Hints on joint storage:

Do not store together with acids, alkalis, oxidizing agents or metals.
Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.

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: butyl caoutchouc (butyl rubber)

Layer thickness: > 0.7 mm

Breakthrough time: 480 min

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

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. 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:

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

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

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

When handling large quantities, supply emergency spray.

Environmental exposure controls

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

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:

Form: pasty

Color: light gray

Odor:

unpleasant

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:

> 100 °C

Evaporation rate:

No data available



SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010

Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

WEICON ST Hardener

Material number 104102

Page: 6 of 10

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 20 °C: 1.55 - 1.56 g/cm ³
Water solubility:	not/slightly miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	not applicable
Thermal decomposition:	No decomposition when used properly.
Viscosity, dynamic:	200000 mPa*s
Explosive properties:	Product is not explosive.
Ignition temperature:	not determined

10. Stability and reactivity

Reactivity:	Corrosive to most metals.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	Reacts violently with acids. Reacts with alkalis, oxidizing agents, and metals.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect against direct sunlight.
Incompatible materials:	Acids, alkalis, oxidizing agents, metals
Hazardous decomposition products:	Toxic gases/vapours. Nitrogen oxides (NO _x), carbon monoxide and carbon dioxide.
Thermal decomposition:	No decomposition when used properly.

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 Corrosion 1B = Causes severe skin burns and eye damage. Serious eye damage/irritation: Lack of data. Sensitisation to the respiratory tract: Lack of data. Skin sensitisation: Sensitization - skin 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.
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SAFETY DATA SHEET

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WEICON ST Hardener

Material number 104102

Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

Page: 7 of 10

Other information: Information about Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine:
LD50 dermal, Rabbit: > 2000 mg/kg bw
Information about Pentaethylenehexamine:
LD50, oral, Rat: 1600 mg/kg
Information about 2,4,6-tris(Dimethylaminomethyl)phenol:
LD50, oral, Rat: 1200 mg/kg

Symptoms

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

General remarks

Handle in accordance with good industrial hygiene and safety practice.

Further hazardous properties cannot be excluded.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.
Information about Amines, polyethylenepoly-; HEPA:
Algae toxicity:
EC50 *Desmodesmus subspicatus* (green algae): 0.5 mg/L/72 h. (OECD 202)
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 2.2 mg/L/48 h. (EU Method C.2)
Fish toxicity:
EC50 *Poecilia reticulata*: 100 mg/L/96 h. (EU Method C.1)

Mobility in soil

No data available

Persistence and degradability

Further details: Biodegradation:
Information about Amines, polyethylenepoly-; HEPA: 9,5 %/10 d (OECD 301 B).
Not readily biodegradable (according to OECD criteria)

Additional ecological information

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.

WEICON ST Hardener

Material number 104102

Page: 8 of 10

14. Transport information**USA: Department of Transportation (DOT)**

Identification number: UN2735
Proper shipping name: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Amines, polyethylenepoly-; Pentaethylenehexamine;
3,6,9-Triazaundecamethylenediamine), mixture

Hazard class or Division: 8
Packing Group: III
Labels: 8
Symbols: G
Special provisions: IB3, T7, TP1, TP28
Packaging – Exceptions: 154
Packaging – Non-bulk: 203
Packaging – Bulk: 241
Quantity limitations – Passenger aircraft / rail: 5 L
Quantity limitations – Cargo only: 60 L
Vessel stowage – Location: A
Vessel stowage – Other: 52

**Canada: Transportation of Dangerous Goods (TDG)**

UN Number: UN2735
Shipping name: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Amines, polyethylenepoly-; Pentaethylenehexamine;
3,6,9-Triazaundecamethylenediamine), mixture

TDG class: 8
Packing group: III
Special provisions: 16
Explosive limit and limited quantity index: 5 L
Passenger carrying road or rail index: 5 L

Sea transport (IMDG)

UN number: UN 2735
Proper shipping name: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Amines, polyethylenepoly-; Pentaethylenehexamine;
3,6,9-Triazaundecamethylenediamine), mixture

Class or division, Subsidiary risk: Class 8, Subrisk -
Packing Group: III
EmS: F-A, S-B
Special provisions: 223, 274
Limited quantities: 5 L
Excepted quantities: E1
Contaminated packaging - Instructions: P001, LP01
Contaminated packaging - Provisions: -
IBC - Instructions: IBC03
IBC - Provisions: -
Tank instructions - IMO: -
Tank instructions - UN: T7
Tank instructions - Provisions: TP1, TP28
Stowage and handling: Category A.
Segregation: SG35
Properties and observations: Colourless to yellowish liquids or solutions 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. React violently with acids. Cause burns to skin, eyes and mucous membranes.

Marine pollutant: yes
Segregation group: 18



SAFETY DATA SHEET

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Revision date: 29/Jan/2018

Version: 2

Language: en-CA,US

Date of print: 1/Feb/2018

WEICON ST Hardener

Material number 104102

Page: 9 of 10

Air transport (IATA)

UN/ID number: UN 2735
Proper shipping name: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Amines, polyethylenepoly-; Pentaethylenehexamine;
3,6,9-Triazaundecamethylenediamine), mixture
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. Y841 - Max. Net Qty/Pkg. 1 L
Passenger and Cargo Aircraft: Pack.Instr. 852 - Max. Net Qty/Pkg. 5 L
Cargo Aircraft only: Pack.Instr. 856 - Max. Net Qty/Pkg. 60 L
Special provisions: A3 A803
Emergency Response Guide-Code (ERG): 8L

15. Regulatory information

National regulations - Canada

No data available

National regulations - U.S. Federal Regulations

2,4,6-tris(Dimethylaminomethyl)phenol:	TSCA Inventory: listed TSCA HPVC: not listed
Amines, polyethylenepoly-:	TSCA Inventory: listed; UVCB; EPA flags XU TSCA HPVC: not listed
Pentaethylenehexamine:	TSCA Inventory: listed TSCA HPVC: not listed
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine:	TSCA Inventory: listed; UVCB; EPA flags XU TSCA HPVC: not listed
3,6,9-Triazaundecamethylenediamine:	TSCA Inventory: listed TSCA HPVC: not listed Clean Air Act: SOCMI Chemical: yes

National regulations - U.S. State Regulations

3,6,9-Triazaundecamethylenediamine: Massachusetts Haz. Substance codes:
6
Pennsylvania Haz. Substance code: -

National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3

16. Other information

Text for labeling: Contains 1 - 25 % 2,4,6-tris(Dimethylaminomethyl)phenol, 1 - 25 % Amines, polyethylenepoly-, 1 - 25 % Pentaethylenehexamine, 1 - 25 % Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear, tetraethylenepentamine and triethylenetetramine, 1 - 25 % Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, < 1 % 3,6,9-Triazaundecamethylenediamine. Safety data sheet available on request.



SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010

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WEICON ST Hardener

Material number 104102

Page: 10 of 10

Hazard rating systems:



NFPA Hazard Rating:
 Health: 2 (Moderate)
 Fire: 1 (Slight)
 Reactivity: 1 (Slight)
 HMIS Version III Rating:
 Health: 2 (Moderate)
 Flammability: 1 (Slight)
 Physical Hazard: 1 (Slight)
 Personal Protection: X = Consult your supervisor

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1
	X

Reason of change: Changes in section 2: Labeling
General revision

Date of first version: 17/Feb/2017

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.