





1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** **CM 510-1 (A&B)**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Building and construction work
- **Application of the substance / the preparation** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Hilti Emirates L.L.C.
Dubai Investments Park
P.O. Box 11051
Dubai
United Arab Emirates
Phone: 800-Hilti (44584) (Toll free)
Fax: +971 4 885 4405
Email: ae.contactus@hilti.com
- **Informing department:** see section 16
- **Emergency telephone number:**
Hilti Emirates L.L.C.
Phone: 800-Hilti (44584) (Toll free)
Fax: +971 4 885 4405
Schweizerisches Toxikologisches Informationszentrum - 24 h Service
Tel.: 0041 / 44 251 51 51 (international)

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 -  C; Corrosive
 - R34: Causes burns.
 -  Xn; Harmful
 - R20/21/22-62-68: Harmful by inhalation, in contact with skin and if swallowed. Possible risk of impaired fertility. Possible risk of irreversible effects.
 -  Xi; Irritant
 - R36/38: Irritating to eyes and skin.
 -  Xi; Sensitising
 - R43: May cause sensitisation by skin contact.
 - R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

· Label elements

- **Labelling according to EU guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:**



C Corrosive

- **Hazard-determining components of labelling:**
3-aminomethyl-3,5,5-trimethylcyclohexylamine
trimethylhexane-1,6-diamine
bisphenol A
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin
(number average molecular weight = 700)
2,3-epoxypropyl o-tolyl ether
Benzyl alcohol
- **Risk phrases:**
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

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- 34 Causes burns.
- 36/38 Irritating to eyes and skin.
- 43 May cause sensitisation by skin contact.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 62 Possible risk of impaired fertility.
- 68 Possible risk of irreversible effects.

· Safety phrases:

- 25 Avoid contact with eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.
Restricted to professional users.

· Other hazards

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description:

Mixture consisting of the following components.

· Dangerous components:

CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine ☒ C R34; ☒ Xn R21/22; ☒ Xi R43 R52/53 ☒ Skin Corr. 1B, H314; ☒ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-50%
CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol ☒ Xn R20/22 ☒ Acute Tox. 4, H302; Acute Tox. 4, H332	25-50%
CAS: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine ☒ C R34; ☒ Xn R22; ☒ Xi R43 ☒ Skin Corr. 1B, H314; ☒ Acute Tox. 4, H302; Skin Sens. 1, H317	10-25%
CAS: 80-05-7 EINECS: 201-245-8	bisphenol A ☒ Xn R62; ☒ Xi R37-41; ☒ Xi R43 R52 Repr. Cat. 3 ☒ Repr. 2, H361f; ☒ Eye Dam. 1, H318; ☒ Skin Sens. 1, H317; STOT SE 3, H335	2,5-10%
CAS: 25068-38-6 NLP: 500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) ☒ Xi R36/38; ☒ Xi R43; ☒ N R51/53 ☒ Aquatic Chronic 2, H411; ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	2,5-10%
CAS: 2210-79-9 EINECS: 218-645-3	2,3-epoxypropyl o-tolyl ether ☒ Xn R68; ☒ Xi R38; ☒ Xi R43; ☒ N R51/53 Muta. Cat. 3 ☒ Muta. 2, H341; ☒ Aquatic Chronic 2, H411; ☒ Skin Irrit. 2, H315; Skin Sens. 1, H317	<2,5%

· Dangerous components A:

CAS: 25068-38-6 NLP: 500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) ☒ Xi R36/38; ☒ Xi R43; ☒ N R51/53 ☒ Aquatic Chronic 2, H411; ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317
CAS: 2210-79-9 EINECS: 218-645-3	2,3-epoxypropyl o-tolyl ether ☒ Xn R68; ☒ Xi R38; ☒ Xi R43; ☒ N R51/53 Muta. Cat. 3 ☒ Muta. 2, H341; ☒ Aquatic Chronic 2, H411; ☒ Skin Irrit. 2, H315; Skin Sens. 1, H317

· Dangerous components B:

CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol ☒ Xn R20/22 ☒ Acute Tox. 4, H302; Acute Tox. 4, H332
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine ☒ C R34; ☒ Xn R21/22; ☒ Xi R43 R52/53 ☒ Skin Corr. 1B, H314; ☒ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412

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CAS: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine C R34; Xn R22; Xi R43 Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317
CAS: 80-05-7 EINECS: 201-245-8	bisphenol A Xn R62; Xi R37-41; Xi R43 R52 Repr. Cat. 3 Repr. 2, H361f; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **Description of first aid measures**

· **After inhalation**

Take affected persons into the open air and position comfortably

Seek medical treatment in case of complaints.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly. If skin irritation persist, call a physician.

· **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· **After swallowing** Instantly call for doctor.

· **Information for doctor**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents** Water spray, carbon dioxide (CO₂), carbon dioxide blanket, foam, or dry powder.

· **Special hazards arising from the substance or mixture** Formation of poisonous gases during heating or in fires.

· **Advice for firefighters**

· **Protective equipment:** In the event of fire, wear self contained breathing apparatus

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Keep away from ignition sources

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

· **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Collect mechanically.

Dispose of contaminated material as waste according to item 13.

· **Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

· **Handling**

· **Precautions for safe handling**

Provide sufficient air exchange and/or exhaust in work rooms. When using, do not eat, drink or smoke. Ingestion, exposure to skin and eyes and inhalation of any general vapours should be avoided.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and containers:** Keep in a cool, dry and dark place; 10 °C to 40 °C.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:** Store in a locked cabinet and out of the reach of children.

· **Storage class** 8 A

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 - Keep away from foodstuffs, beverages and food.
 - The usual precautionary measures should be adhered to general rules for handling chemicals.
 - Take off immediately all contaminated clothing
 - Wash hands during breaks and at the end of the work.
 - Avoid contact with the eyes and skin.
- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.
- **Protection of hands:**
 - Protective gloves
 - EN 374 + EN 388
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
 - Tightly sealed safety glasses.
 - EN 166 + EN 170
- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Fluid
 - Colour:** Light yellow
 - Odour:** Amine-like
 - Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
 - Melting point/Melting range:** Not determined
 - Boiling point/Boiling range:** > 60 °C
- **Flash point:** Not applicable
- **Inflammability (solid, gaseous)** Not applicable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Critical values for explosion:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapour pressure:** Not determined.
- **Density** Not determined
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with**
 - Water:** Partly miscible
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - dynamic:** Not determined.
 - kinematic:** Not determined.
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Stable until boiling point
- **Possibility of hazardous reactions**
 - Reacts with strong acids and alkali
 - Reacts with strong oxidizing agents

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- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Corrosive gases/vapours

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	LD50	1030 mg/kg (rango)
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100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg (rango)
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Dermal	LD50	2000 mg/kg (rbt)
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25620-58-0 trimethylhexane-1,6-diamine

Oral	LD50	900 mg/kg (rango)
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- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** Sensitization possible by skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Product is suspected to cause injury to foetus.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water bodies or sewage system.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
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- **Uncleaned packagings:**

- **Recommendation:**

Disposal must be made according to official regulations.

Dispose of packaging according to regulations on the disposal of packagings.

14 Transport information

- **UN-Number**

- **ADR, IMDG, IATA**

(A) - / (B) 2735

- **UN proper shipping name**

- **ADR, IMDG, IATA**

(A) -
(B) AMINES, LIQUID, CORROSIVE, NOS
(trimetilhexanmetilendiamina; Isphorondiamine)

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Trade name: CM 510-1 (A&B)

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· Transport hazard class(es)		
· ADR, IMDG, IATA		
· Class	(A)	/ (B) 8
· Label	(A)	/ (B) 8
· Packing group		
· ADR, IMDG, IATA (A) / (B) III		
· Environmental hazards:		
· Marine pollutant: No		
· Special precautions for user Not applicable.		
· EMS Number: (A) - (B) F-A, S-B		
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.		
· Transport/Additional information:		
· ADR		
· Limited quantities (LQ)	(A)	/ (B) 5L
· Tunnel restriction code	(A)	/ (B) E

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Designation according to EC guidelines:
- Hazard-determining components of labelling: Contains epoxy constituents. See information supplied by the manufacturer.
- National regulations
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
- Chemical safety assessment: not required.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H361f Suspected of damaging fertility.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- R20/22 Harmful by inhalation and if swallowed.
- R21/22 Harmful in contact with skin and if swallowed.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R36/38 Irritating to eyes and skin.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52 Harmful to aquatic organisms.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R62 Possible risk of impaired fertility.
- R68 Possible risk of irreversible effects.

· Department issuing data specification sheet:

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