

Material Safety Data Sheet

according to Regulation (EC) 1907/2006



Product name : HÄRTER HG
Revision : 09.08.2012 **Version :** 9.0.0
Print date : 14.08.2012

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01. Identification of the substance/preparation and of the company/undertaking

Product name

HÄRTER HG

Use of the substance / preparation

HÄRTER - HARDENER - DURCISSEUR - ENDURECEDOR

Manufacturer/Supplier

TECA-PRINT AG

Street/P.O.Box

Bohlstrasse 17, Postfach

Country code/Postal code/Town/City

CH - 8240 Thayngen/Schweiz

Telephone / Telefax

+41 (0) 52 645 20 00 / +41 (0) 52 645 21 01

Contact

info@teca-print.com

Emergency information

Schweizerisches Toxikologisches Infozentrum >>> 24 Stunden täglich : CH - nationaler Notruf für Vergiftungsnotfälle = 145
oder Telefon : +41 (0) 44 251 51 51

02. Hazards identification

Hazard designation

Directive 67/548/EEC or 1999/45/EC

May cause sensitisation by skin contact. · Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. · Risk of serious damage to eyes. · Harmful by inhalation.

Classification : R 43 · R 52/53 · Xi ; R 41 · Xn ; R 20 · Xi ; R 38

Regulation (EC) No 1272/2008 (GHS)

Causes serious eye damage. · Harmful if inhaled. · May cause an allergic skin reaction. · Harmful to aquatic life with long lasting effects.

Classification : Aquatic Chronic 3 ; H412 · Acute Tox. 4 ; H332 · Eye Dam. 1 ; H318 · Skin Irrit. 2 ; H315 · Skin Sens. 1 ; H317

03. Composition/information on ingredients

Hazardous components

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE ; EC-No. : 217-164-6; CAS-No. : 1760-24-3

Percentage : 25 - 50 %

Classification 67/548/EEC : R43 R52/53 Xi ; R41 Xn ; R20

Classification 1272/2008 (GHS) : Eye Dam. 1 ; H318 Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

3,6-DIAZAOCTANETHYLENEDIAMIN ; EC-No. : 203-950-6; CAS-No. : 112-24-3

Percentage : 10 - 25 %

Classification 67/548/EEC : C ; R34 R43 R52/53 Xn ; R21

Classification 1272/2008 (GHS) : Skin Corr. 1B ; H314 Acute Tox. 4 ; H312 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

METHANOL ; EC-No. : 200-659-6; CAS-No. : 67-56-1

Percentage : < 1 %

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Classification 67/548/EEC : F ; R11 T ; R39/23/24/25 T ; R23/24/25
Classification 1272/2008 (GHS) : Flam. Liq. 2 ; H225 Acute Tox. 3 ; H301 Acute Tox. 3 ; H311 Acute Tox. 3 ; H331
STOT SE 1 ; H370

For the wording of the listed risk phrases refer to section 16.

04. First-aid measures

General

Immediately remove all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Unconsciousness: lateral position - call a physician.

After inhalation

Take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration. Call a physician.

After skin contact

Immediately wash away with polyethylene glycol. Do NOT use solvents or thinners. Flush with plenty of water. Apply cream carefully to the cleaned skin.

After eye contact

Remove contact lenses, keep eyelids open. Flush with plenty of water (10 - 15 min.). Call a physician.

After ingestion

Do not induce vomiting - call a physician. Keep at rest.

05. Fire-fighting measures

Suitable extinguishing media

Alcohol resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media

Waterjet.

Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Special protective equipment

When extinguishing fires, use breathing apparatus with an independent source of air.

Additional information

Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.

06. Accidental release measures

Personal precautions

Provide for sufficient ventilation. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

Methods for cleaning up/collecting

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents.

07. Handling and storage

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Information for safe handling

Prevent the creation of inflammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the OEL (=Occupational Exposure Limit). Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Comply with the health and safety at work laws.

Information about protection against explosions and fires

Keep away from ignition sources and provide for good ventilation.

Requirements to be met by storerooms and containers

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access.

Information about separation of incompatible products

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

Further information about storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep containers dry and cool.

08. Exposure controls/personal protection

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit) , suitable respiratory protection must be worn.

Components with critical values that require monitoring at the workplace (exposure limits)

METHANOL ; CAS-No. : 67-56-1

Specification : Limit value (8 hours) (EC)

Value : 200 ppm / 260 mg/m³

Remarks : H

Version date : 07.02.2006

Specification : Limit value (Short term) (GB)

Value : 250 ml/m³ / 310 mg/m³

Remarks : H

Version date : 01.01.1989

Specification : Limit value (8 hours) (GB)

Value : 200 ml/m³ / 260 mg/m³

Remarks : H

Version date : 01.01.1989

Personal protective equipment

Immediately remove all contaminated clothing. Do not eat or drink during work - no smoking. Wash hands before breaks and after work.

Respiratory protection

If workplace limits are exceeded, a gas mask approved for this purpose must be worn.

Hand protection

Solvent-resistant protective gloves must be worn. After washing hands replace lost skin fat by fat containing skin creams.

Eye protection

Use safety glasses.

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Body protection

Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact. Use appropriate skin protection cream before work.

09. Physical and chemical properties

Image

Form : Liquid.
Colour : Light yellowish.
Odour : Like amine.

Relevant safety data

Boiling point / range :	(1013 hPa)		147 - 200	°C	literature
Flash point :		>	100	°C	
Ignition temperature :			200 - 300	°C	
Lower explosion limit :			no data available		literature
Upper explosion limit :			no data available		literature
Vapour pressure :	(50 °C)	<	1000	hPa	
Vapour pressure :	(20 °C)	ca.	2	hPa	literature
Density :	(20 °C)		1,05	g/cm ³	
Solubility in water :	(20 °C)	ca.	30	% b.w.	
pH value :			6 - 8		

10. Stability and reactivity

Conditions to avoid

Stable under recommended storage and handling conditions(See section 7).

Materials to avoid

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

11. Toxicological information

Experience on practice

This product is unlikely to harm health, given normal and proper handling and hygienic precautions. Prolonged inhalation of vapours in high concentrations may lead to headache, giddiness and nausea. In case of contact with the product: danger of resorption through the skin, irritation of skin/mucous membranes.

Additional toxicological information

The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (1999/45/EC).

12. Ecological information

Additional ecological information

General ecological information

Do not empty into waters or drains. Toxic effect on fishes and micro-organisms.

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13. Disposal considerations

Product

Do not empty into waters or drains. Can be taken to a suitable incineration centre in observance of local regulations.

Waste key

ABFALLSCHLÜSSEL nach AVV/EWC 08 03 14 Druckfarbenschlämme, die gefährliche Stoffe enthalten.
Die empfohlene Abfalleinstufung bezieht sich nur auf den reinen Druckfarbenabfall.

Contaminated packaging

Recommendation

Empty containers should be scrapped or reconditioned. Containers, which have not been emptied properly must be treated as special waste.

14. Transport information

The product does not constitute a hazardous substance in national / international road, rail, sea and air transport.

Land transport ADR/RID

Classification

Class : 9 **Kemlercode :** 90
UN number : 3082 **Classification-Code :** M6

LQ 7 · E 1 · Tunnel restriction code : E

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE)

Packaging

Packaging group : III
Label : 9 / N

Maritime transport IMDG/GGVSea

Classification

IMDG-Code : 9 **EmS number :** F-A / S-F
UN number : 3082 **Marine Poll. :** P

LQ 5 I · E 1

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE)

Packaging

Packaging group : III
Label : 9 / N

Air transport ICAO-TI and IATA-DGR

Classification

Class : 9
UN number : 3082

E 1

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE)

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Packaging

Packaging group : III
Label : 9 / N

15. Regulatory information

Labelling (67/548/EEC or 1999/45/EC)

Danger symbol and danger designation



Xn ; Harmful

Hazard-determining components of labelling

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE ; CAS-No. : 1760-24-3

3,6-DIAZAOCTANETHYLENEDIAMIN ; CAS-No. : 112-24-3

R-phrases

- 43 May cause sensitisation by skin contact.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
41 Risk of serious damage to eyes.
20 Harmful by inhalation.
38 Irritating to skin.

S-phrases

- 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
35 This material and its container must be disposed of in a safe way.
51 Use only in well-ventilated areas.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
24/25 Avoid contact with skin and eyes.

Regulation (EC) No 1272/2008 (GHS)

Classification

Hazard classes and hazard categories

Acute Tox. 4 (inhalation) · Skin Irrit. 2 · Eye Dam. 1 · Skin Sens. 1 · Aquatic Chronic 3

Labelling

Hazard pictograms



Corrosion (GHS05) · Exclamation mark (GHS07)

Signal word

Danger

Hazard-determining components of labelling

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE ; CAS-No. : 1760-24-3

3,6-DIAZAOCTANETHYLENEDIAMIN ; CAS-No. : 112-24-3

Hazard statements

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H318 Causes serious eye damage.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash ... thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see ... on this label).
P501 Dispose of contents/container to ...

National regulatory information

Other regulations

16. Other information

Further information

The details in this material safety data sheet satisfy national and EC legislation. We have no knowledge or control over the user's working conditions however. The product may not be used for any purpose other than that specified in chapter 1 unless written consent has been obtained. The user is responsible for the observance of all required statutory provisions. Particular classification of preparations: According to Directive 88/379/EEC, Article 3, Paragraph 3b, classification derived from direct toxicological testing of the preparation take precedence over classification derived from using the conventional (calculation) method.

Relevant changes

03. Hazardous components · 08. Components with critical values that require monitoring at the workplace (exposure limits)

R-Phrases of components

11 Highly flammable.
20 Harmful by inhalation.
21 Harmful in contact with skin.
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
34 Causes burns.
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
41 Risk of serious damage to eyes.
43 May cause sensitisation by skin contact.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS Hazard statements of components

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

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H331 Toxic if inhaled.
H332 Harmful if inhaled.
H370 Causes damage to organs.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Department issuing data sheet

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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.
