

Material Safety Data Sheet

according to Regulation (EC) 1907/2006, Article 31

Product name : Härter HV

Revision : 26.03.2014

Version : 1

Print date : 22.08.2014



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

1.1 Product identifier

Product name

Härter HV

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

No further relevant information available.

Application of the substance / the mixture

Additive

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier:

TECA-PRINT AG
Bohlstrasse 17, Postfach
CH - 8240 Thayngen/Schweiz
Phone: +41 (0) 52 645 20 00
Fax: +41 (0) 52 645 21 01
E-mail: info@teca-print.com

1.4 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

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05



GHS07



GHS09

Signal word

Danger

Hazard-determining components of labelling:

N-(3-(trimethoxysilyl)propyl)ethylenediamine
methanol
ethylenediamine

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Hazard statements

H332 Harmful if inhaled.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective gloves / eye protection.
P261 Avoid breathing vapours.
P273 Avoid release to the environment.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable
vPvB: Not applicable

03 Composition/information on ingredients

3.2 Chemical characterization: Substances

Description

Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 1760-24-3 EINECS: 217-164-	N-(3-(trimethoxysilyl)propyl)ethylenediamine ----- ☠ Eye Dam. 1, H318; ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H332; Skin Sens. 1, H317	50-100%
CAS: 67-56-1 EINECS: 200-659-6	methanol ----- ☠ Flam. Liq. 2, H225; ☠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ☠ STOT SE 1, H370	1-2.5%
CAS: 107-15-3 EINECS: 203-468-6	ethylenediamine ----- ☠ Flam. Liq. 3, H226; ☠ Resp. Sens. 1, H334; ☠ Skin Corr. 1B, H314; ☠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	< 1%

04 First aid measures

4.1 Description of first aid measures:

After inhalation:

Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

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No further relevant information available.

05 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters:

Protective equipment:

Wear self-contained respiratory protective device.

06 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 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 disposal information.

07 Handling and storage

7.1 Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

None.

7.3 Specific end use(s):

No further relevant information available.

08 Exposure controls/personal protection

Additional information about design of technical facilities:

No further data; see item 7.

8.1 Control parameters

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Ingredients with limit values that require monitoring at the workplace:

67-56-1 methanol

WEL	Short-term value: 333 mg/m ³ , 250 ppm Long-term value: 266 mg/m ³ , 200 ppm Sk
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Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygiene measures:

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

09 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Appearance	
Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point /Melting range:	Undetermined.
Boiling point /Boiling range:	259 °C

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Flash point:	136 °C (Abel Penski)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature :	
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limit :	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 °C:	Not determined.
Density at 20 °C:	0,99 g/cm ³
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic at 20 °C:	Not determined.
Kinematic:	Not determined.
VOC (EC):	2,00 %

9.2 Other information

No further relevant information available.

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions:

No dangerous reactions known.

10.4 Conditions to avoid:

No further relevant information available.

10.5 Incompatible materials:

No further relevant information available.

10.6 Hazardous decomposition products:

No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

107-15-3 ethylenediamine

Oral	LD50	;	500 mg/kg (rat)
Dermal	LD50	;	730 mg/kg (rabbit)
Inhalative	LC50/4h	;	0.3 mg/l (mouse)

Primary irritant effect::

on the skin: No irritant effect.

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on the eye: Strong irritant with the danger of severe eye injury.

Sensitization: Sensitization possible through inhalation.
Sensitization possible through skin contact.

Additional toxicological information:

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

Harmful
Irritant

12 Ecological information

12.1 Toxicity:

Aquatic toxicity:

No further relevant information available.

12.2 Persistence and degradability:

No further relevant information available.

12.3 Bioaccumulative potential:

No further relevant information available.

12.4 Mobility in soil:

No further relevant information available.

Ecotoxicological effects:

Remark:

Harmful to fish

Additional ecological information:

General notes:

Harmful to aquatic organisms

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue:

08 03 12:	waste ink containing dangerous substances
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Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

14 Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN3082

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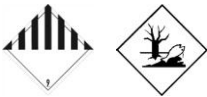


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14.2	UN proper shipping name ADR IMDG IATA	3 0 8 2 ENVIRONMENTAL LY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N-(3-(trimethoxysilyl)propyl)ethylenediamine) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N- (3- (trimethoxysilyl)propyl) ethylenediamine), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N- (3- (trimethoxysilyl)propyl) ethylenediamine)
14.3	Transport hazard class(es) ADR, IMDG, IATA  Class: Label:	9 Miscellaneous dangerous substances and articles. 9
14.4	Packing group: ADR, IMDG, IATA	III
14.5	Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA):	Product contains environmentally hazardous substances: N- (3 - (trimethoxysilyl) propyl) ethylenediamine Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
14.6	Special precautions for user Danger code (Kemler): EMS Number:	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code IMDG Limited quantities (LQ) Excepted quantities (EQ) UN "Model Regulation":	Not applicable. ----- 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 E ----- 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (N-(3-(trimethoxysilyl)propyl)ethylenediamine), 9, III

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

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15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful 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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H370	Causes damage to organs.
H411	Toxic to aquatic life with long lasting effects.

Department issuing data sheet:

TECA-PRINT AG, Bohlstrasse 17, CH - 8240 Thayngen, Switzerland
msds@teca-print.com

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 3: Acute toxicity, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2