

Material Safety Data Sheet

according to Regulation (EC) 1907/2006



Product name : HÄRTER HN
Revision : 07.08.2013 **Version :** 14.1.0
Print date : 19.01.2015

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

Product name

HÄRTER HN

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

Flammable. · May cause sensitization by inhalation. · Harmful by inhalation.

Classification : R 10 · R 42 · Xn ; R 20 · R 66

Regulation (EC) No 1272/2008 (GHS)

Flammable liquid and vapour. · May cause allergy or asthma symptoms or breathing difficulties if inhaled. · Harmful if inhaled.

Classification : Acute Tox. 4 ; H332 · Flam. Liq. 3 ; H226 · Resp. Sens. 1 ; H334 · Resp. Sens. 1 ; H334 · Resp. Sens. 1 ; H334 · STOT SE 3 ; H336

03. Composition/information on ingredients

Hazardous components

N-BUTYL ACETATE ; EC-No. : 204-658-1; CAS-No. : 123-86-4

Percentage : 25 - 50 %

Classification 67/548/EEC : R10 R67 R66

Classification 1272/2008 (GHS) : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

M-TOLYLIDENE DIISOCYANATE ; EC-No. : 247-722-4; CAS-No. : 26471-62-5

Percentage : 0,1 - 1 %

Classification 67/548/EEC : T+ ; R26 Carc. Cat.3 ; R40 R42/43 R52/53 Xi ; R36/37/38

Classification 1272/2008 (GHS) : Acute Tox. 2 ; H330 Resp. Sens. 1 ; H334 Carc. 2 ; H351 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335 Aquatic Chronic 3 ; H412

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

Further components

ISOCYANATE, no dangerous substance classification

Percentage : 50 - 75 %

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04. First aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Unconsciousness: lateral position - call a physician.

After inhalation

Remove concerned person out of danger area. Take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration.

After skin contact

Wash away with soap and water and rinse. Do NOT use solvents or thinners.

After eye contact

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

After ingestion

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

05. Firefighting 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

Remove ignition sources. 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). Subsequently put in the waste container. Do not seal (CO₂ may be given off).

07. Handling and storage

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.

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Information about protection against explosions and fires

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

Requirements to be met by storerooms and containers

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type. 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. Avoid heating over 50°C.

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)

N-BUTYL ACETATE ; CAS-No. : 123-86-4

Specification : STEL (GB)
Value : 200 ml/m³ / 950 mg/m³
Version date : 01.01.1989

Specification : TWA (GB)
Value : 150 ml/m³ / 710 mg/m³
Version date : 01.01.1989

Personal protective equipment

General protective and hygiene measures

Immediately remove all contaminated clothing.

Respiratory protection

If workplace limits are exceeded, a gas mask approved for this purpose must be worn. Breathing protection equipment required in inadequately ventilated places and during spraying. Sufferers from asthma, chronic bronchitis etc. are advised not to use this product.

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.

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.

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Colour : Light yellowish.
Odour : Like solvent.

Relevant safety data

Boiling temperature / boiling range :	(1013 hPa)	ca.	125 °C	Literature value
Flash point :		ca.	30 °C	
Ignition temperature :		ca.	420 °C	
Lower explosion limit :			1,2 Vol-%	Literature value
Upper explosion limit :			7,5 Vol-%	Literature value
Vapour pressure :	(50 °C)	<	1000 hPa	
Vapour pressure :	(20 °C)	ca.	13 hPa	Literature value
Density :	(20 °C)	ca.	1,14 g/cm ³	
Water solubility :	(20 °C)		insoluble	
PH value :			not applicable	

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. Exothermic reaction with amines and alcohols. In contact with water (moisture) CO₂ is formed which leads to an excess pressure in closed containers.

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

Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL (=Occupational Exposure Limit). Repeated exposure may lead to permanent respiratory disability. 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-organismes.

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 05 01 Isocyanatabfälle.

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Die empfohlene Abfalleinstufung bezieht sich nur auf den reinen Isocyanatabfall.

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

Land transport ADR/RID

Classification

Class : 3 **Kemlercode :** 30
UN number : 1210 **Classification-Code :** F1

Transport in containers with max. 450 litres contents are not subject to the regulations of ADR/RID.
Tunnel restriction code : D/E

Proper shipping name

PRINTING INK RELATED MATERIAL

Packaging

Packaging group : III
Label : 3

Maritime transport IMDG/GGVSea

Classification

IMDG-Code : 3 **EmS number :** F-E / S-D
UN number : 1210 **Marine Poll. :** -

IMDG 2.3.2.5 (<= 30 l)

Proper shipping name

PRINTING INK RELATED MATERIAL

Packaging

Packaging group : III
Label : 3

Air transport ICAO-TI and IATA-DGR

Classification

Class : 3
UN number : 1210

E 1

Proper shipping name

PRINTING INK RELATED MATERIAL

Packaging

Packaging group : III
Label : 3

15. Regulatory information

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

Danger symbol and danger designation



Xn ; Harmful

Hazard-determining components of labelling

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M-TOLYLIDENE DIISOCYANATE ; CAS-No. : 26471-62-5

R-phrases

10 Flammable.
42 May cause sensitization by inhalation.
20 Harmful by inhalation.
66 Repeated exposure may cause skin dryness or cracking.

S-phrases

35 This material and its container must be disposed of in a safe way.
51 Use only in well-ventilated areas.
63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
24 Avoid contact with skin.

Special designation for certain preparations

91 Contains isocyanates. See information supplied by the manufacturer.

Regulation (EC) No 1272/2008 (GHS)

Classification

Hazard classes and hazard categories

Flam. Liq. 3 · Acute Tox. 4 (Inhalative) · STOT SE 3 · Resp. Sens. 1 · Skin Sens. 2

Labelling

Hazard pictograms



Flame (GHS02) · Health hazard (GHS08) · Exclamation mark (GHS07)

Signal word

Danger

Hazard-determining components of labelling

M-TOLYLIDENE DIISOCYANATE ; CAS-No. : 26471-62-5

Hazard statements

H226 Flammable liquid and vapour.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P311 Call a POISON CENTER or doctor/physician.
P304/340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P403/235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

Special rules for supplemental label elements for certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

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EUH208 Contains .May produce an allergic reaction.

National regulatory information

Other regulations

--- HMIS-rating: health 2H / flammability 3F / reactivity 1R / personal protection SC

International regulatory information

Maximum VOC content (EC) : 33,0 Wt %

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.

Relevant changes

03. Further components · 03. Further ingredients

R-Phrases of components

- | | |
|----------|---|
| 10 | Flammable. |
| 26 | Very toxic by inhalation. |
| 36/37/38 | Irritating to eyes, respiratory system and skin. |
| 40 | Limited evidence of a carcinogenic effect. |
| 42/43 | May cause sensitization by inhalation and skin contact. |
| 52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 66 | Repeated exposure may cause skin dryness or cracking. |
| 67 | Vapours may cause drowsiness and dizziness. |

GHS Hazard statements of components

- | | |
|------|--|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H412 | Harmful to aquatic life with long lasting effects. |

Department issuing data sheet

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

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.