

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.03.2016

Version number 1

Revision: 01.03.2016

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

1.1 Product identifier

Trade name: **UNILUX Air Dry Surfacer Hardener**

Article number: 60888

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

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Application of the substance / the mixture Quenchant

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Carolux

Kerkenbos 10 77 T

6546 BB Nijmegen –

Netherlands

Tel: 0031 (0) 24 36 056 01

www.carolux.nl

Further information obtainable from: Product safety department: info@carolux.nl

1.4 Emergency telephone number:

National Poisoning Information Centre - Bilthoven - The Netherlands

T +31 (0)30 274 88 88

Restricted to physicians for information on ingredients.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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



GHS02



GHS07

Signal word Danger

Hazard-determining components of labelling:

Hexamethylene diisocyanate,
oligomers 4-methylpentan-2-one

n-butyl acetate 4-

isocyanatosulphonyltoluene

Hazard statements

H225 Highly flammable liquid and vapour.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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Precautionary statements

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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 person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH204 Contains isocyanates. May produce an allergic reaction.

Restricted to professional users.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Chemical characterisation: Mixtures**

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components %(m/m):

CAS: 28182-81-2	Hexamethylene diisocyanate, oligomers	25-50%
NLP: 500-060-2	⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	
Reg.nr.: 01-2119485796-17		
CAS: 123-86-4	n-b utyl acetate	25-50%
EINECS: 204-658-1	⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	
Reg.nr.: 01-2119485493-29		
CAS: 108-10-1	4-methylpentan-2-one	10-25%
EINECS: 203-550-1	⚠ Flam. Liq. 2, H225; ⚠ Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119473980-30		
Reg.nr.: 01-2119455851-35	Hydrocarbons, C9, aromatics	0,5-2,5%
	⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; Aquatic Chronic 2, H411; ⚠ STOT SE 3, H335-H336	
CAS: 4083-64-1	4-isocyanatosulphonyltoluene	≤ 0,5%
EINECS: 223-810-8	⚠ Resp. Sens. 1, H334; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
	For the wording of the listed risk phrases refer to section 16.	

Additional information:**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Remove contactlenses.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

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**

No further relevant information available.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media
 - Suitable extinguishing agents: CO₂ or powder. Fight larger fights with alcohol resistant foam.
 - For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture
 - During heating or in case of fire poisonous gases are produced.
 - Carbon monoxide (CO)
- 5.3 Advice for firefighters
 - Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Mount respiratory protective device.
 - Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: 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).
 - 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 - Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
 - Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.
 - Examination of lung function should be carried out on a regular basis on persons spraying this preparation.
 - Information about fire - and explosion protection:
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
 - Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
 - Storage:
 - Requirements to be met by storerooms and receptacles:
 - Store in a cool location.
 - Store only in the original receptacle.
 - Information about storage in one common storage facility: Store away from oxidising agents.
 - Further information about storage conditions: Keep container tightly sealed.
 - Storage class: 3
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

108-10-1 4-methylpentan-2-one

IOELV Short-term value: 208 mg/m³, 50 ppm
 Long-term value: 83 mg/m³, 20 ppm

DNELs

28182-81-2 Hexamethylene diisocyanate, oligomers

Dermal Acute - short-term exposure - local effects 1 mg/cm² (worker)
 Inhalative Long-term exposure - systemic effects 0,5 mg/m³ (worker)

123-86-4 n-butyl acetate

Inhalative Acute - short-term exposure - systemic effects 960 mg/m³ (worker)

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Acute - short-term exposure - local effects 960 mg/m3 (worker)
 Long-term exposure - systemic effects 480 mg/m3 (worker) Long-term exposure - local effects 480 mg/m3 (worker)

108-10-1 4-methylpentan-2-one

Dermal Long-term exposure - systemic effects 11,8 mg/kg bw/day (worker)
 Inhalative Acute - short-term exposure - systemic effects 208 mg/m3 (worker)
 Acute - short-term exposure - local effects 208 mg/m3 (worker)
 Long-term exposure - systemic effects 83 mg/m3 (worker)
 Long-term exposure - local effects 83 mg/m3 (worker)

. PNECs**28182-81-2 Hexamethylene diisocyanate, oligomers**

PNEC 26670 mg/kg (aqua, marine water)
 53182 mg/kg (bd)
 266700 mg/kg (sediment freshwater)
 PNEC 38,28 mg/l (STP)
 0,127 mg/l (aqua, freshwater)
 1,27 mg/l (aqua, intermittent releases)
 0,0127 mg/l (aqua, marine water)

123-86-4 n-butyl acetate

PNEC 0,981 mg/kg (sediment freshwater)
 PNEC 35,6 mg/l (STP)
 0,18 mg/l (aqua, freshwater)
 0,36 mg/l (aqua, intermittent releases)
 0,018 mg/l (aqua, marine water)
 0,0981 mg/l (sediment marine water)

108-10-1 4-methylpentan-2-one

PNEC 0,83 mg/kg (sediment marine water)
 8,27 mg/kg (sediment freshwater)
 PNEC 27,5 mg/l (STP)
 0,6 mg/l (aqua, freshwater)
 1,5 mg/l (aqua, intermittent releases)
 0,06 mg/l (aqua, marine water)

. Additional information:

The lists valid during the making were used as basis.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons spraying this preparation.

. 8.2 Exposure controls**. Personal protective equipment:**

General protective and hygienic 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.

Avoid contact with the eyes and skin.

. 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.

Short term filter device:

Filter A.

. Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product.

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

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- Material of gloves

Suitable materials for safety gloves (EN 374): Butyl rubber, BR

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

Thickness of the gloves ≥ 0.3 mm (butylacetate) Value for the permeation: Level ≥ 60 min (butylacetate)

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 goggles

- Body protection: Solvent resistant protective clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form:	Fluid
Colour:	Clear
Odour:	Characteristic Not determined.
Odour threshold:	

- pH-value:

Not determined.

- Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	114 °C

- Flash point:

14 °C

- Flammability (solid, gaseous):

Not applicable.

- Ignition temperature:

370 °C

- Decomposition temperature:

Not determined.

- Self-igniting:

Product is not selfigniting.

- Danger of explosion:

Explosive with or without contact with air.

- Explosion limits: Lower: Upper:

Vapour pressure at 20 °C:	1,2 Vol %
Density at 20 °C: Relative density	9,0 Vol %

Vapour density	10,7 hPa
Evaporation rate	0,95 g/cm ³

Solubility in / Miscibility with water:	Not determined.
Partition coefficient (n-octanol/water): Not	Not determined.

determined.

- Viscosity:

Dynamic:	Not determined.
Kinematic at 20 °C:	± 12 s (DIN 53211/4)

- Solvent content:

Organic solvents:	53.0 %
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VOC (EC)	53,1 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
 - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions
 - Reacts with alcohols.
 - Reacts with amines.
 - Reacts with water.
 - Reacts with strong oxidizing agents.
- 10.4 Conditions to avoid High temperatures.
- 10.5 Incompatible materials: Oxidizing agents.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity
- Harmful if inhaled.

LD/LC50 values relevant for classification:

123-86-4 n-butyl acetate

- Oral LD50 10760 mg/kg (rat) (OECD 423)
- Dermal LD50 >14112 mg/kg (rabbit) (OECD 402)
- Inhalative LC50/4h 23,4 mg/l (rat) (OECD 403 in vivo, aerosol)

108-10-1 4-methylpentan-2-one

- Oral LD50 2080 mg/kg (rat)
- Dermal LD50 >2000 mg/kg (rabbit)
- Inhalative LC50/4h 8,2-16,4 mg/l (rat)

4083-64-1 4-isocyanatosulphonyltoluene

- Oral LD50 2600 mg/kg (rat)

Primary irritant effect:

- Skin corrosion/irritation Based on available data, the classification criteria are not met.

- Serious eye damage/irritation
- Causes serious eye irritation.

- Respiratory or skin sensitisation
- May cause an allergic skin reaction.

- Sensitisation May cause sensitisation by skin contact.

- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

- Germ cell mutagenicity Based on available data, the classification criteria are not met.

- Carcinogenicity Based on available data, the classification criteria are not met.

- Reproductive toxicity Based on available data, the classification criteria are not met.

- STOT-single exposure

- May cause respiratory irritation. May cause drowsiness or dizziness.

- STOT-repeated exposure Based on available data, the classification criteria are not met.

- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

- Aquatic toxicity:

123-86-4 n-butyl acetate

- EC50/48h 44 mg/l (daphnia magna)
- EC50/72h 647,7 mg/l (desmodesmus supspicatus)
- IC50 356 mg/l (tetrahymena pyriformis) (40 h)
- NOAEL/72h 200 mg/l (desmodesmus supspicatus)

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LC50/96h 18 mg/l (pimphales promelas) (OECD 203)

108-10-1 4-methylpentan-2-one

EC50/96h 400 mg/l (algae)

EC50/48h >200 mg/l (daphnia magna)

LC50/96h >179 mg/l (fish)

4083-64-1 4-isocyanatosulphonyltoluene

EC50 2511 mg/l (ac)

LC50/96h 597 mg/l (Brachydanio rerio)

12.2 Persistence and degradability No further relevant information available.

Degree of elimination:

123-86-4 n-butyl acetate

OECD 301D 83 % (I) (28 d)

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

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.

SECTION 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 01 11* waste paint and varnish containing organic solvents or other hazardous substances

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number

ADR,ADN, IMDG, IATA

UN1263

14.2 UN proper shipping name

ADR/ADN

1263 PAINT RELATED MATERIAL

IMDG

PAINT RELATED MATERIAL

IATA

Paint related material

14.3 Transport hazard class(es)

ADR,ADN, IMDG, IATA



Class

3 Flammable liquids.

Label

3

14.4 Packing group

ADR,ADN, IMDG, IATA

II

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler):

33

EMS Number:

F-E,S-E

Stowage Category

B

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14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

Transport/Additional information:

ADR/ADN

Limited quantities (LQ)

Excepted quantities (EQ)

5L Code:

E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500

ml 2

Transport category

Tunnel restriction code

D/E

IMDG

Limited quantities (LQ)

Excepted quantities (EQ)

5L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500

ml UN 1263 PAINT RELATED MATERIAL, 3, II

UN "Model Regulation":

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t

National regulations:

Other regulations, limitations and prohibitive regulations

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful 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.

H411 Toxic to aquatic life with long lasting effects.

Contact: Dhr. F. Dammers

Abbreviations and acronyms:

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 Harmonised 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

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Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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