

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.04.2022

Version number 04-00

Revision: 19.04.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**Trade name: **DELTA® Härter Klarlack Aqua SG****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 Hardening agent/ Curing agent**Uses advised against**

This product is not suitable for uses other than those specified in the "Use of the substance/mixture". If your particular manner of use is not listed, please contact the creator of this safety data sheet.

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Dörken Coatings GmbH & Co. KG
 Wetterstr. 58
 58313 Herdecke
 Germany
 www.doerkencoatings.de

Phone: +49 2330 63 243

Fax: +49 2330 63 100 243

Further information obtainable from: msds.coatings@doerken.de**1.4 Emergency telephone number:**

Australia: 61-290372994

United Kingdom: 44-870-8200418 and 44-2038073798

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

GHS07

Acute Tox. 4	H332 Harmful if inhaled.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.

 Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

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

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DE/EN

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Hazard pictograms



GHS07

Signal word Warning

Hazard-determining components of labelling:

Hydrophilic aliphatic polyisocyanate

Propane, oxybis[methoxy-

hexamethylene-di-isocyanate

Hazard statements

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P312 Call a doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 160994-68-3	Hydrophilic aliphatic polyisocyanate Acute Tox. 4, H332; Skin Sens. 1B, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	50-75%
CAS: 111109-77-4 EC number: 601-045-4 Reg.nr.: 01-0000015420-83-xxxx	Propane, oxybis[methoxy- Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10-25%

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Additional information:

All hydrocarbons used comply with note P (less than 0.1% benzene) of the CLP regulation.
For the wording of the listed hazard phrases refer to section 16.

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

In all cases of doubt, or when symptoms persist, seek medical advice.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Soiled, soaked clothes immediately take off.

Never give anything by mouth to an unconscious person.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

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 or rash occurs: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

After eye contact:

Remove contact lenses. Keep eye lids open and rinse plentifully for at least 10 minutes with clean running water. Subsequently consult an ophthalmologist.

In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing:

Rinse mouth thoroughly with water.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

Inhalation may cause an irritating effect to mucous membranes.

After eye contact: May cause irritations.

Headache, dizziness, numbness, sickness/nausea, tiredness, stunning effect, dry skin, allergic reactions.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**

Extinguishing powder, foam, carbon dioxide.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet

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5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Fire will produce dangerous decomposition products like dense, black smoke, carbon dioxide (CO₂), carbon monoxide (CO) and nitrogen oxides (NO_x). Inhalation may cause serious health damage.

Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources and ensure a well-ventilated room. Do not inhale fumes.

Avoid contact with skin and eyes.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

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

Dispose of the material collected according to regulations.

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**

Avoid the formation of ignitable and explosion- hazardous solution vapours.

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Material can become charged electrostatically. Anti-static clothing including shoes are recommended.

Avoid contact with skin and eyes as well as inhalation of vapours.

Avoid the handling of incompatible substances and mixtures. Incompatible substances: see section 10.5

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Use explosion-proof apparatus / fittings and spark-proof tools.

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Handle only outside or in explosion protected rooms.
Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Make sure spills can be contained, e.g. in sump pallets.
Protect from frost, heat and direct sunlight. Keep tightly closed, cool and dry.

Information about storage in one common storage facility:

Note the rules for common storage in accordance with TRGS 510 - "Storage of hazardous substances in transportable containers".

Store away from foodstuffs.

Further information about storage conditions: None.

Storage class: 10

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

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Additional information about design of technical facilities:**

Ensure a good ventilation. This can be achieved by local exhaustion or general exhaust air.

Ingredients with limit values that require monitoring at the workplace: No data.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls Provide good ventilation and/or an exhaust system in the work area.

Personal protective equipment:**General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing

Do not inhale gases / fumes / aerosols.

Do not eat, drink, smoke or sniff while working.

Use skin protection cream for skin protection.

In case of suffering from allergy, asthma and chronic illness of the respiratory system avoid use of this product.

Respiratory protection:

Use always breathing protection with splashing medium.

Use combination filter type A(-P2) according to EN 141.

Protection of hands:

Work with gloves. Gloves must be inspected for damage before use. Defective or damaged gloves must not be used. Gloves must satisfy the specifications of EC directive 89/686/EWG and standard EN 374.

It is recommended to use long gloves to minimize contact by splashing.

Material of gloves

Nitrile rubber

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

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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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed safety goggles are to be worn during all work, in accordance with EN 166.

Have eye wash bottle or eye rinse ready at work place.

Professional Cooperative Rules - BGR 192 Use of eye and face protection

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: Colourless

Odour: Weak after glycol ethers

Odour threshold: For mixtures not applicable.

pH-value: Mixture is non-soluble (in water).

Change in condition

Melting point/Freezing point: Not security-related.
Initial boiling point and boiling range: 175 °C

Flash point: 65 °C

Flammability (solid, gas): Not applicable.

Ignition temperature: 165 °C

Decomposition temperature: For mixtures not applicable.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Explosion limits:

Lower: 0.8 Vol %
Upper: 5.6 Vol %

Oxidising properties The product is flammable, although not oxidising.

Vapour pressure at 20 °C: 0.7 hPa

Density at 20 °C: ~1.09 g/cm³

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Vapour density	Not applicable.
Evaporation rate	For mixtures not applicable.
Solubility in / Miscibility with water:	Miscible / waterdilutable.
polar solvents:	Partly miscible.
non-polar solvents:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	For mixtures not applicable.
Viscosity:	< 60 s (20°C / ISO 2431 / 6 mm) > 20,5 mm ² /s (40°C)
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity Vapours can form explosive mixtures with air.

10.2 Chemical stability Sensitive to moisture.

10.3 Possibility of hazardous reactions

Exotherm reactions with water and aqueous solutions, alcohols, amines, alcalis under secession of carbon dioxide (CO₂). Upon contact with moisture forming of CO₂ resuting in increased pressure in closed containers. Danger of bursting!

10.4 Conditions to avoid

Protect from moisture contamination.

Keep away from heat sources, sparks and open flames.

10.5 Incompatible materials: strong oxidizing agents

10.6 Hazardous decomposition products:

In case of fire arise: smoke and carbon oxides. Under certain fire conditions tracks of other toxic products can not be excluded.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if inhaled.

LD/LC50 values relevant for classification:

The quoted data are literature values and/or manufacturer/supplier data.

160994-68-3 Hydrophilic aliphatic polyisocyanate

Inhalative	LC ₅₀ / 4 h	11 mg/l (ATE)
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Specific symptoms in biological assay:

Skin corrosion/irritation

Causes skin irritation.

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Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Additional toxicological information:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The product is not classified as carcinogenic, mutagenic or toxic to reproduction (CMR properties).

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.

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

Aspiration hazard Due to the viscosity (see section 9), classification as an aspiration hazard is omitted.

General notes:

Inhalation of solvent concentrations in excess of the OEL or MAK limit values can lead to health damage such as irritation of the mucous membranes and respiratory tract, damage to the kidneys and liver, and impairment of the central nervous system. Symptoms: headaches, dizziness, fatigue, muscle weakness, narcotic effect and, in exceptional cases, loss of consciousness. Prolonged or repeated contact with the product impairs the skin's natural lipid replenishment and causes the skin to dry out. The product can enter the body through the skin. Splashes of solvent may cause irritation to the eye and reversible damage.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential

111109-77-4 Propane, oxybis[methoxy-

Partition Coefficient log Pow	0.42 (n-octanol/water)
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12.4 Mobility in soil No further relevant information available.

General notes: Do not allow product to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

This product does not contain relevant substances that have been assessed as persistent, bioaccumulative and toxic (PBT) or as very persistent and very bioaccumulative (vPvB).

PBT: Not applicable.

vPvB: Not applicable.

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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.
Must be specially treated adhering to official regulations.

European waste catalogue

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP13	Sensitising
HP14	Ecotoxic

SECTION 14: Transport information**14.1 UN-Number**

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)ADR, ADN, IMDG, IATA
Class Void**14.4 Packing group**

ADR, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.**14.6 Special precautions for user** Not applicable.**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

UN "Model Regulation": Void

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.

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REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

National regulations:

Information about limitation of use:

Observe employment restrictions concerning young persons.

Observe employment restrictions for expectant or nursing mothers.

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

Labelling according to Regulation (EC) No 2004/42 Not applicable.

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.

The given conditions of work of the user extract themselves from our knowledge and control. The product/the preparation may be used without written permission for no other use, than the mentioned intended purpose. The user is responsible for the observance of all necessary legal instructions.

This Safety Data Sheet replaces all previous versions. With the newest version in each case, the preceding Safety Data Sheets are set out of strength.

For further information please consult the "Technical Data Sheet".

Misuse may cause damage to health and environment.

Labelling according to regulation (EC) No 528/2012

Additional information: Contains isocyanates. May produce an allergic reaction.

Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008

Acute toxicity - inhalation
 Skin corrosion/irritation
 Serious eye damage/eye irritation
 Skin sensitisation
 Specific target organ toxicity (single exposure)
 Hazardous to the aquatic environment - long-term
 (chronic) aquatic hazard

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Abbreviations and acronyms:

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

*** Data compared to the previous version altered.**