

acc. to OSHA HCS

Printing date Jan 25, 2023 Reviewed on Jan 25, 2023

#### 1 Identification

#### **Product identifier**

Trade name: DELTA® 1K Klarlack HG / PU 70 brillant

Application of the substance / the mixture Coating 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.

## 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

Information department: msds.coatings@doerken.de

Emergency telephone number: GBK/Infotrac ID 114993: (USA domestic) 1 800 535 5053

## 2 Hazard(s) identification

#### Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 3 H226 Flammable liquid and vapor.

#### Label elements

### **GHS** label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

#### Hazard pictograms



GHS02

## Signal word Warning

#### **Hazard statements**

Flammable liquid and vapor.

## **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

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Take precautionary measures against static discharge.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

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

#### Classification system:

## NFPA ratings (scale 0 - 4)



Health = 0 Fire = 2 Reactivity = 0

## HMIS-ratings (scale 0 - 4)



O Health = 0

Fire = 2

Reactivity = 0

#### Other hazards

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

Vapours can form explosive mixtures with air.

## Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

## 3 Composition/information on ingredients

**Chemical characterization: Mixtures** 

**Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous	components:	
	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	≥25-≤50%
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	10-25%
34590-94-8	Dipropylene glycol monomethyl ether	<5%

## 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.

## 4 First-aid measures

#### **Description of first aid measures**

## **General information:**

In all cases of doubt, or when symptoms persist, seek medical advice.

Soiled, soaked clothes immediately take off.

Never give anything by mouth to an unconscious person.

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After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Wash with plenty of soap and water.

#### 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 opthalmologist.

#### After swallowing:

Rinse out mouth and then drink plenty of water.

Seek immediate medical advice.

#### Information for doctor:

#### Most important symptoms and effects, both acute and delayed

Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

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

Indication of any immediate medical attention and special treatment needed Symptomatic treatment.

## 5 Fire-fighting measures

## **Extinguishing media**

#### Suitable extinguishing agents:

Extinguishing powder, foam, carbon dioxide.

Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: Water with full jet

#### Special hazards arising from the substance or mixture

Flammable liquid and vapor.

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 (CO<sub>2</sub>), carbon monoxide (CO) and nitrogen oxides (NOx). Inhalation may cause serious health damage.

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

#### **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.

#### 6 Accidental release measures

#### 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.

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## **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.

#### Methods and material for containment and cleaning up:

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

Dispose of the collected material according to regulations.

#### 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.

## **Protective Action Criteria for Chemicals**

PAC-1:			1.=-	
	Dipropylene glycol monomethyl ether		150 ppm	
	xylene (mix)		130 ppm	
	2-(2-ethoxyethoxy)ethanol		75 ppm	
26896-20-8	2-ethyl-2,5-dimethylhexanoic acid		6 mg/m³	
	phthalic anhydride		18 mg/m	
108-65-6	2-Methoxy-1-methylethyl acetate		50 ppm	
112-34-5	2-(2-Butoxyethoxy)ethanol		30 ppm	
98-83-9	2-phenylpropene		100 ppm	
PAC-2:			•	
34590-94-8	Dipropylene glycol monomethyl ether		1700* ppr	
1330-20-7	xylene (mix)		920* ppm	
111-90-0	2-(2-ethoxyethoxy)ethanol		100 ppm	
26896-20-8	2-ethyl-2,5-dimethylhexanoic acid		66 mg/m <sup>3</sup>	
85-44-9	phthalic anhydride		56 mg/m <sup>3</sup>	
108-65-6	2-Methoxy-1-methylethyl acetate		1,000 ppr	
112-34-5	2-(2-Butoxyethoxy)ethanol		33 ppm	
98-83-9	8-83-9 2-phenylpropene		830 ppm	
PAC-3:			•	
34590-94-8	Dipropylene glycol monomethyl ether	99	900** ppm	
1330-20-7	xylene (mix)	25	500* ppm	
111-90-0	2-(2-ethoxyethoxy)ethanol	45	50 ppm	
26896-20-8	2-ethyl-2,5-dimethylhexanoic acid	40	00 mg/m³	
85-44-9	phthalic anhydride	10	10,000 mg/m³	
108-65-6	2-Methoxy-1-methylethyl acetate	50	00* ppm	
112-34-5	2-(2-Butoxyethoxy)ethanol	20	00 ppm	

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 98-83-9
 2-phenylpropene
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 5000\* ppm
 5000\* ppm

## 7 Handling and storage

#### Handling:

### Precautions for safe handling

Avoid the formation of ignitible 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 elektrostatically. 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 protection against explosions and fires: Keep ignition sources away - Do not smoke.

## 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: Store away from foodstuffs.

Further information about storage conditions: None.

Storage class: 3

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

## 8 Exposure controls/personal protection

#### Additional information about design of technical systems:

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

#### **Control parameters**

### Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

## 34590-94-8 Dipropylene glycol monomethyl ether

PEL Long-term value: 600 mg/m³, 100 ppm

Skin

REL Short-term value: 900 mg/m³, 150 ppm

Long-term value: 600 mg/m³, 100 ppm

Skin

TLV Long-term value: 50 ppm

### **Regulatory information**

PEL: Guide to Occupational Exposure Values (OSHA PELs) REL: Guide to Occupational Exposure Values (NIOSH RELs)

TLV: Guide to Occupational Exposure Values (TLV)

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

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 eat, drink, smoke or sniff while working.

Use skin protection cream for skin protection.

#### **Breathing equipment:**

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.

## **Material of gloves**

Nitrile rubber, NBR

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

## Eye protection:

Tightly sealed goggles

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

Body protection: Solvent resistant protective clothing

## 9 Physical and chemical properties

Information on basic physical and chemical properties		
General Information		
Appearance:		
Form:	Fluid	
Color:	Colorless	
Odor:	Weak after aliphatic hydrocarbons	
Odor threshold:	For mixtures not applicable.	
pH-value:	Mixture is non-soluble (in water).	
	(0. 11	

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Change in condition Melting point/Melting range:	Not security-related.
Boiling point/Boiling range:	145-205 °C (293-401 °F)
Flash point:	54 °C (129.2 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	>200 °C (>392 °F)
Decomposition temperature:	For mixtures not applicable.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vap mixtures are possible.
Explosion limits:	
Lower:	0.6 Vol %
Upper:	7 Vol %
Oxidizing properties	The product is flammable, although not oxidising.
Vapor pressure at 20 °C (68 °F):	3 hPa (2.3 mm Hg)
Density at 20 °C (68 °F):	0.87-0.93 g/cm³ (7.26-7.761 lbs/gal)
Vapor density	Not applicable.
Evaporation rate	For mixtures not applicable.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
polar solvents:	Not miscible or difficult to mix.
non-polar solvents:	Fully miscible.
Partition coefficient (n-octanol/wat	er): For mixtures not applicable.
Viscosity:	> 90 s (20°C / DIN 53211 / 4 mm)
	> 60 s (20°C / ISO 2431 / 6 mm)
	> 20,5 mm²/s (40°C)
Solvent content:	
VOC content:	53.5-<53.84 %
Other information	No further relevant information available.

## 10 Stability and reactivity

Reactivity Vapours can form explosive mixtures with air.

Chemical stability Product is stable under normal storage conditions.

Possibility of hazardous reactions

No dangerous reactions known.

No dangerous reactions are known.

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Conditions to avoid Keep away from heat sources, sparks and open flames.

**Incompatible materials:** strong oxidizing agents

Hazardous decomposition products:

In case of fire may be liberated: Smoke, Carbon monoxide and carbon dioxide.

## 11 Toxicological information

## Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

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

Specific symptoms in biological assay:

on the skin: Repeated exposure may cause skin dryness or cracking.

on the eye: Splashes of solvent may cause irritation to the eye and reversible damage.

Sensitization: No sensitizing effects known.

Additional toxicological information: Carcinogenic.

Carcinogenic categories

IARC (Inter	national Agency for Research on Cancer)	
1330-20-7	xylene (mix)	3
27253-31-2	Neodecansäure, Cobaltsalz	2B
98-83-9	2-phenylpropene	2B

#### NTP (National Toxicology Program)

None of the ingredients is listed.

#### **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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

## 12 Ecological information

**Toxicity** 

Aquatic toxicity: There are no statements/information available of the preparation.

Persistence and degradability		
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics		
OECD 301F Manometric Respiromet	try Test 80 % (28d)	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics		
Biodegradation	80 % (28d)	

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## Behavior in environmental systems:

#### Bioaccumulative potential

## Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Partition Coefficient log Pow 5-6.7 (n-octanol/water)

Mobility in soil No further relevant information available.

#### 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.

Other adverse effects No further relevant information available.

## 13 Disposal considerations

#### Waste treatment methods

#### Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

## 14 Transport information

**UN-Number** 

ADR, IMDG, IATA UN1263

**UN** proper shipping name

DOT Paint
ADR 1263 PAINT
IMDG, IATA PAINT

## Transport hazard class(es)

DOT



Class 3 Flammable liquids

Label 3

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**ADR** 



Class 3 (F1) Flammable liquids

Label

IMDG, IATA



Class 3 Flammable liquids

Label 3

Packing group

DOT, ADR, IMDG, IATA

**Environmental hazards:** Not applicable.

Special precautions for user Warning: Flammable liquids

Hazard identification number (Kemler code): 30

EMS Number: F-E,S-E

Stowage Category A

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

**Transport/Additional information:** 

DOT

**Quantity limitations**On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

**ADR** 

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

**Remarks:** When using receptacles with a capacity of at most 450 litre,

the transport is not subject to the regulations/specifications of the ADR. However, it is recommended to note then in the

shipping documents:

> TRANSPORT AFTER SUBSECTION 2.2.3.1.5 ADR <

**IMDG** 

Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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Remarks:	Not subject to the IMDG provisions when packed in receptacles not exceeding 30 L capacity.
UN "Model Regulation":	UN 1263 PAINT, 3, III, (D/E)

## 15 Regulatory information

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

Sara		
	(extremely hazardous substances):	
	ngredient is listed.	
	(Specific toxic chemical listings):	
1330-20-7		
27253-31-2	Neodecansäure, Cobaltsalz	
	2-(2-ethoxyethoxy)ethanol	
1	phthalic anhydride	
112-34-5	2-(2-Butoxyethoxy)ethanol	
TSCA (Toxio	Substances Control Act):	
34590-94-8	Dipropylene glycol monomethyl ether	ACTIVE
1330-20-7	xylene (mix)	ACTIVE
623-40-5	2-Pentanone oxime	ACTIVE
27253-30-1	Lithiumneodecanoat	ACTIVE
127519-17-9	A mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxyphenyl]propionates	ACTIVE
53988-05-9	calcium isononanoate	ACTIVE
27253-31-2	Neodecansäure, Cobaltsalz	ACTIVE
111-90-0	2-(2-ethoxyethoxy)ethanol	ACTIVE
	2-ethyl-2,5-dimethylhexanoic acid	ACTIVE
	phthalic anhydride	ACTIVE
	2-Methoxy-1-methylethyl acetate	ACTIVE
	2-(2-Butoxyethoxy)ethanol	ACTIVE
	calcium dipropionate	ACTIVE
84268-33-7	Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, methyl ester	ACTIVE
98-83-9	2-phenylpropene	ACTIVE
Hazardous A	Air Pollutants	
1330-20-7	xylene (mix)	
27253-31-2	Neodecansäure, Cobaltsalz	
85-44-9	phthalic anhydride	
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## **Proposition 65**

#### Chemicals known to cause cancer:

98-83-9 2-phenylpropene

#### Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

#### Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

#### Carcinogenic categories

1330-20-7	xylene	(mix)	١
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## TLV (Threshold Limit Value)

1330-20-7	xvlene i	(mix
1330-20-7	VAICHE	

A4

85-44-9 phthalic anhydride

A4

## MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

## NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

#### **GHS** label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

#### **Hazard pictograms**



#### GHS02

#### Signal word Warning

### **Hazard statements**

Flammable liquid and vapor.

#### **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

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

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### National regulations:

#### Information about limitation of use:

Observe employment restrictions concerning young persons.

Observe employment restrictions for expectant or nursing mothers.

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.

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.

#### **Contact:**

Date of preparation / last revision Jan 25, 2023

#### Abbreviations and acronyms:

Flammable Liquids 3: Flammable liquids - Category 3

#### **Sources**

- Verordnung 1907/2006/EG (REACH-Verordnung)
- Verordnung 1272/2008/EG (CLP-Verordnung)
- \* Data compared to the previous version altered.

US