Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

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

· **1.1 Product identifier**
· Trade name: **Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow**

· Article number: 70612, 70613
· **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

· **1.3 Details of the supplier of the safety data sheet**
· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg
Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

· Further information obtainable from: Laboratory
· **1.4 Emergency telephone number:** Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.
+44 (171) 635 91 91
National Poison Inform. Centre
Medical Toxicology Unit
Avalonley Road
London SE14 5ER

* **SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**
· Classification according to Regulation (EC) No 1272/2008


GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.


GHS07

Acute Tox. 4 H332 Harmful if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

· **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 Warning
· Hazard-determining components of labelling: aliphatic polyisocyanate
2-butoxyethyl acetate
hexamethylene-di-isocyanate
· Hazard statements H226 Flammable liquid and vapour.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 1)

H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

· Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.
P280	Wear protective gloves / eye protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P312	IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/ regional/national/international regulations.

· Additional information: 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 Chemical characterisation: Mixtures**
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 28182-81-2 EC number: 931-274-8 Reg.nr.: 01-2119485796-17-0000	aliphatic polyisocyanate Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 112-07-2 EINECS: 203-933-3 Index number: 607-038-00-2 Reg.nr.: 01-211975112-47	2-butoxyethyl acetate Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	12.5-25%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-211947591-29	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226 STOT SE 3, H336	12.5-25%
CAS: 822-06-0 EINECS: 212-485-8 Index number: 615-011-00-1 Reg.nr.: 01-2119457571-37-0001	hexamethylene-di-isocyanate Acute Tox. 3, H311; Acute Tox. 3, H331 Resp. Sens. 1, H334 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	<1%

· Additional information: 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: Take affected persons out into the fresh air.
Position and transport stably in side position.
· 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.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 2)

· After skin contact: If skin irritation continues, consult a doctor.
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**

Breathing difficulty
Headache
Dizziness
Dizziness
Nausea
Allergic reactions

· Information for doctor: Symptoms in intoxication with (aromatic) hydrocarbons (dosis letalis about 30 g)
a) In acute intoxication: headache, dizziness, euphoria, gastro-intestinal dysfunction, state of excitement, coma.
b) In chronic intoxication: myelotoxic damage, fatigue, dizziness, emaciation, cardiac palpitation after physical exercise, leucopenia, anemia, leukosis.
Therapy in hydrocarbons intoxication: In case of inhalation provision of fresh air; in case of peroral intake administration of Carbo medicinalis; only after intubation conduct of gastrolavage in application of Carbo medicinalis; in case of cramps administration of Diazepam 20 mg intravenously.
Acute health risks in isocyanate exposition
- dermal effect: Isocyanate contact with skin cause in dependence of the exposition duration to severe skin irritation and occasionally to contact dermatitis.
- effect on eyes: Fumes in concentration above the tolerable working place limit value, aerosols and dust promotes lacrimation and eye burning. Isocyanate eye splashs may cause damages of cornea.
- respiratory effect: In exposition of isocyanate fumes and in dependence of their concentration severe nasal irritation and pharyngitis with subsequent damage of upper and lower respiratory tract may occur. Most frequently observed symptoms are xerosis of the throat, chest pressure often accompanied by headache, respiratory malfunction and breathlessness. Long-term inhaling of high isocanate concentrations sometimes can result in a pulmonary edema.
Chronical health risks in isocyanate exposition:
Recurrent exceedings of permitted working place limit values can cause chronical respiratory diseases like bronchitis and worsening of respiratory function. In sensitive / disposed subjects sensibilization and hypersensitization may occur leading to asthmatic dysfunction (obstructive respiratory disease).

· Hazards Danger of impaired breathing.

· **4.3 Indication of any immediate medical attention and special treatment needed**

If swallowed, gastric irrigation with added, activated carbon.
If swallowed or in case of vomiting, danger of entering the lungs.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents: Water with full jet

· **5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Carbon monoxide (CO)

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 3)

Nitrogen oxides (NOx)
Hydrogen cyanide (HCN)
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.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
· Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
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** Ensure adequate ventilation
Keep away from ignition sources.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
· **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.
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** Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.
· Information about fire - and explosion protection: Highly volatile, flammable constituents are released during processing.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **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: Store away from oxidising agents.
Store away from foodstuffs.
· Further information about storage conditions: Store receptacle in a well ventilated area.
Keep container tightly sealed.
· Storage class: 3

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 4)

· **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:

112-07-2 2-butoxyethyl acetate	
WEL	Short-term value: 332 mg/m³, 50 ppm Long-term value: 133 mg/m³, 20 ppm Sk
108-65-6 2-methoxy-1-methylethyl acetate	
WEL	Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm Sk
822-06-0 hexamethylene-di-isocyanate	
WEL	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO

· DNELs

28182-81-2 aliphatic polyisocyanate		
Inhalative	DNEL (Kurzzeit-akut)	1 mg/m³ Air (ARB)
	DNEL (Langzeit-wiederholt)	0.5 mg/m³ Air (ARB)
112-07-2 2-butoxyethyl acetate		
Oral	DNEL (Kurzzeit-akut)	18 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	4.3 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	102 mg/kg bw/day (ARB)
		27 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	102 mg/kg bw/day (ARB)
		36 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	333-775 mg/m³ Air (ARB)
		166-499 mg/m³ Air (BEV)
	DNEL (Langzeit-wiederholt)	133 mg/m³ Air (ARB)
		67 mg/m³ Air (BEV)
108-65-6 2-methoxy-1-methylethyl acetate		
Oral	DNEL (Langzeit-wiederholt)	1.67 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	153.5 mg/kg bw/day (ARB)
		54.8 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	550 mg/m³ Air (ARB)
	DNEL (Langzeit-wiederholt)	275 mg/m³ Air (ARB)
		33 mg/m³ Air (BEV)
822-06-0 hexamethylene-di-isocyanate		
Inhalative	DNEL (Kurzzeit-akut)	0.07 mg/m³ Air (ARB)
	DNEL (Langzeit-wiederholt)	0.035 mg/m³ Air (ARB)

· PNECs

28182-81-2 aliphatic polyisocyanate	
PNEC (wässrig)	38.28 mg/l (KA)

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 5)

	0.0127 mg/l (MW)
	0.127 mg/l (SW)
	1.27 mg/l (WAS)
PNEC (fest)	53,200 mg/kg Trockengew (BO)
	26,670 mg/kg Trockengew (MWS)
	266,700 mg/kg Trockengew (SWS)
112-07-2 2-butoxyethyl acetate	
PNEC (wässrig)	90 mg/l (KA)
	0.0304 mg/l (MW)
	0.304 mg/l (SW)
	0.56 mg/l (WAS)
PNEC (fest)	0.68 mg/kg Trockengew (BO)
	0.203 mg/kg Trockengew (MWS)
	2.03 mg/kg Trockengew (SWS)
108-65-6 2-methoxy-1-methylethyl acetate	
PNEC (wässrig)	100 mg/l (KA)
	0.0635 mg/l (MW)
	0.635 mg/l (SW)
	6.35 mg/l (WAS)
PNEC (fest)	0.29 mg/kg Trockengew (BO)
	0.329 mg/kg Trockengew (MWS)
	3.29 mg/kg Trockengew (SWS)
822-06-0 hexamethylene-di-isocyanate	
PNEC (wässrig)	8.42 mg/l (KA)
	>0.00774 mg/l (MW)
	>0.0774 mg/l (SW)
	0.774 mg/l (WAS)
PNEC (fest)	2.6 mg/kg Trockengew (BO)
	1.33 mg/kg Trockengew (MWS)
	13.34 mg/kg Trockengew (SWS)

· Ingredients with biological limit values:

822-06-0 hexamethylene-di-isocyanate	
BMGV	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine

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

· **8.2 Exposure controls**
· Personal protective equipment:
· General protective and hygienic measures:
Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Clean skin thoroughly immediately after handling the product.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.

· Respiratory protection: Short term filter device:
Filter A/P2
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.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 6)

· Protection of hands: Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.

Protective gloves

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times´ data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374.
This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).
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.
Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
STOKO EMULSION (http://www.stoko.com)
Skin protection recommendation for skin cleaning after product handling:
FRAPANTOL (http://www.stoko.com)
Skin protection agent recommendation for skin aftercare:
SOLOPOL (http://www.stoko.com)
STOKO VITAN (http://www.stoko.com)

· Material of gloves 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 Value for the permeation: Level ≤ 5, 480 min
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable: Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)

· As protection from splashes gloves made of the following materials are suitable: Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)

· Not suitable are gloves made of the following materials: Leather gloves
Strong material gloves

· Eye protection:

Tightly sealed goggles

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 7)

· Body protection: Protective work clothing

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· General Information	
· Appearance:	
Form:	Fluid
Colour:	Colourless
· Odour:	Characteristic
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	124-128 °C
· Flash point:	27 °C
· Ignition temperature:	280 °C
· 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:	1.5 Vol %
Upper:	10.8 Vol %
· Vapour pressure at 20 °C:	3.4 hPa
· Density at 20 °C:	1.04 g/cm³
· Solubility in / Miscibility with water:	Partly soluble.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	42.9 %
Solids content:	0.0 %
· **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 and stored according to specifications.
· **10.3 Possibility of hazardous reactions**	Reacts with acids, alkalis and oxidising agents. Violent reactions with -NHx, -OH and -SH- groups.
· **10.4 Conditions to avoid**	No further relevant information available.
· **10.5 Incompatible materials:**	No further relevant information available.
· **10.6 Hazardous decomposition products:**	Hydrogen cyanide (prussic acid) Isocyanate Carbon monoxide and carbon dioxide Possible in traces.

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 8)

* **SECTION 11: Toxicological information**

· **11.1 Information on toxicological effects**
· Acute toxicity Harmful if inhaled.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)		
Oral	LD50	11,742 mg/kg (rat)
Dermal	LD50	9,098 mg/kg
Inhalative	LC50/4 h	0.71 mg/l

28182-81-2 aliphatic polyisocyanate		
Oral	LD50	>2,500 mg/kg (rat)
	NOAEL-Werte	3 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
		>2,000 mg/kg (rat)
Inhalative	LC50/4 h	0.39 mg/l (rat) (OECD TG 403)

112-07-2 2-butoxyethyl acetate		
Oral	LD50	1,880 mg/kg (rat)
Dermal	LD50	1,480 mg/kg (rbt)
Inhalative	LC50/4 h	11 mg/l (ATE)
	LC50/8h	>3.91 mg/l (rat)

108-65-6 2-methoxy-1-methylethyl acetate		
Oral	LD50	6,190 mg/kg (rat) (OECD 401)
	NOAEL-Werte	1,500 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit) (OECD 402)
		>2,000 mg/kg (rat)
Inhalative	LC50/4h	>10,000 mg/m3 (rat)
	LC50	>23.8 mg/l (rat)
	LC50/4 h	35.7 mg/l (rat)
	LC50/48h	100 mg/l (Desmodesmus subspicatus)

822-06-0 hexamethylene-di-isocyanate		
Oral	LD50	746 mg/kg (rat) (OECD 401)
Dermal	LD50	593 mg/kg (rabbit)
		>7,000 mg/kg (rat) (OECD 402)
Inhalative	LC50/4 h	0.124 mg/l (rat) (OECD 403)

· Primary irritant effect:
· Skin corrosion/irritation Based on available data, the classification criteria are not met.
· Serious eye damage/irritation Based on available data, the classification criteria are not met.
· Respiratory or skin sensitisation May cause an allergic skin reaction.
· CMR effects (carcinogenity, 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.
· 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.

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 9)

* **SECTION 12: Ecological information**

· **12.1 Toxicity**

· Aquatic toxicity:	
28182-81-2 aliphatic polyisocyanate	
EC50	3,828 mg/l (BES) (OECD 209)
LC 0/96h	>82.8 mg/l (Brachydanio rerio) (OECD 203)
EC50/48h	127 mg/l (daphnia magna) (RL 67/548/EWG, Anhang V, C.3.)
ErC50/72h	>1,000 mg/l (Desmodesmus subspicatus)
EC0	>100 mg/l (daphnia magna) (OECD 202)
EL50/48h	127 mg/l (daphnia magna)
LL50/96h	8.9 mg/l (Brachydanio rerio)
EC10	370 mg/l (Desmodesmus subspicatus)
EC50/72h	>100 mg/l (Scenedesmus subspicatus) (OECD 201)
LC50/96h	>100 mg/l (Danio rerio.) (RL 67/548/EWG, Anhang V, C.1.)
112-07-2 2-butoxyethyl acetate	
IC50/72h	>100 mg/l (Scenedesmus subspicatus)
EC50/48h	37 mg/l (daphnia magna)
	10 mg/l (piscis)
EC20/3h	>1,000 mg/l (BES)
EC10	30.4 mg/l (ceriodaphnia Dubai)
EC50/72h	1,570 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	28.3 mg/l (Oncorhynchus mykiss)
108-65-6 2-methoxy-1-methylethyl acetate	
EC50	>100 mg/l (daphnia magna)
LC50	63.5 mg/l (Oryzias latipes)
EC50/48h	>500 mg/l (daphnia magna) (RL 67/548/EWG. Anhang V, C.2.)
ErC50/72h	>1,000 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
EC20/0.5h	>1,000 mg/l (BES) (OECD 209)
NOEC	47.5 mg/l (Oryzias latipes)
NOEC/21d	≥100 mg/l (daphnia magna)
EC10	>1,000 mg/l (BES)
LC50/96h	134 mg/l (Oncorhynchus mykiss)
	>1,000 mg/l (Oryzias latipes)
	161 mg/l (Pimephales promelas)
822-06-0 hexamethylene-di-isocyanate	
EC50	842 mg/l (bacteria) (OECD 209)
LC 0/96h	82.8 mg/l (Brachydanio rerio) (OECD TG 203)
ErC50/72h	>77.4 mg/l (Desmodesmus subspicatus) (EU C.3)
EC0	>89.1 mg/l (daphnia magna) (OECD TG 202)
NOEC	11.7 mg/kg (Desmodesmus subspicatus) (EU C.3)
EC50/72h	>77.4 mg/l (Scenedesmus subspicatus) (OECD TG 201)
LC50/96h	22 mg/l (Brachydanio rerio)

· **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.

(Contd. on page 11)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 10)

· Ecotoxical effects:
· Remark: Harmful to fish
· Additional ecological information:
· General notes: Do not allow product to reach ground water, water course or sewage system.
Harmful to aquatic organisms
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
· **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 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by hazardous substances

· Uncleaned packaging:
· Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
· Recommended cleansing agents: Alcohol

*

SECTION 14: Transport information

· **14.1 UN-Number**
· ADR, IMDG, IATA UN1263

· **14.2 UN proper shipping name**
· ADR 1263 PAINT
· IMDG, IATA PAINT

· **14.3 Transport hazard class(es)**

· ADR

· Class 3 (F1) Flammable liquids.
· Label 3

(Contd. on page 12)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 11)

· IMDG, IATA

· Class	3 Flammable liquids.
· Label	3
· **14.4 Packing group**	
· ADR, IMDG, IATA	III
· **14.5 Environmental hazards:**	
· Marine pollutant:	No
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	30
· EMS Number:	F-E,S-E
· Stowage Category	B
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· Transport/Additional information:	
· ADR	
· 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
· Transport category	3
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1263 PAINT, 3, III

*
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
· 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.

(Contd. on page 13)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 12)

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
· VOC EU 322.1 g/l
· DECOPAINT: subject to EU-regulations 2004/42/EG (ANNEX II) EU limit for this product (product-category (Kat. B/d)): 420g/l (2010). The ready-to-use product (comprises of clear lacquer and hardener) contains max. 420 g/l VOC.

· **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
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
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.

· Recommended restriction of use refer to Technical Data Sheet (TDS)
Only for professional use - no end consumer product

· Department issuing SDS: Laboratory
· Contact: Elke Hake
Fon ++49 (0)911 64296-59
@mail E.Hake@akemi.de

· 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 Organisation
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)
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. 3: Flammable liquids – Category 3
Acute Tox. 3: Acute toxicity - dermal – Category 3
Acute Tox. 4: Acute toxicity - inhalation – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

(Contd. on page 14)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.07.2020 Version number 2 Revision: 29.07.2020

Trade name: Hardener for Turbo Gloss 2K-UHS Clearcoat 2:1 Slow

(Contd. of page 13)

· Sources REACH directive 1907/2006/EC
· * Data compared to the previous version altered. Adaptation in accordance with REACH directive 1907/2006/EC