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

1.1 Product identifier

Trade name

einzA Aqua All-Grund, weiß

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

Relevant identified uses of the substance or mixture
decorative paints/finishes

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
einzA Farben GmbH & Co KG
Junkersstraße 13
30179 Hannover

Telephone no. +49 (0)511 67490-0
Fax no. +49 (0)511 67490-20
e-mail info@einzA.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 3; H412

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

-

Signal word
-

Hazard statement(s)

H412	Harmful to aquatic life with long lasting effects.

Hazard statements (EU)

EUH208	Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1), 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Precautionary statement(s)

P501 Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment
The components of this product are not considered to be a PBT.

vPvB assessment
The components of this product are not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**			
	13463-67-7 236-675-5 022-006-00-2 01-2119489379-17	Carc. 2; H351i	>= 10.00 - < 25.00	wt%
2	**2-butoxyethanol**			
	111-76-2 203-905-0 603-014-00-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315	< 5.00	wt%
3	**zinc oxide**			
	1314-13-2 215-222-5 030-013-00-7 01-2119463881-32	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0.25 - < 2.50	wt%
4	**1,2-benzisothiazol-3(2H)-one**		**pls. refer to footnote (1)**	
	2634-33-5 220-120-9 613-088-00-6 -	Acute Tox. 4*; H302 Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317 Acute Tox. 2; H330 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	< 0.05	wt%
5	**pyridine-2-thiol 1-oxide, sodium salt**			
	3811-73-2 223-296-5 613-344-00-7 -	EUH070 Acute Tox. 4; H302 Acute Tox. 3; H311 Acute Tox. 3; H331 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 STOT RE 1; H372 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	< 0.10	wt%
6	**reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)**			

	55965-84-9 - 613-167-00-5 -	Acute Tox. 2; H310 Acute Tox. 2; H330 Acute Tox. 3; H301 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 Eye Dam. 1; H318 Skin Corr. 1C; H314 Skin Sens. 1A; H317	< 0.0015	wt%
7	**2-methyl-2H-isothiazol-3-one**			
	2682-20-4 220-239-6 613-326-00-9 -	Acute Tox. 2; H330 Acute Tox. 3; H301 Acute Tox. 3; H311 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 Eye Dam. 1; H318 Skin Corr. 1B; H314 Skin Sens. 1A; H317	< 0.10	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16
(*,**,***,****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2
(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	V, W, 10	-	-	-
3	-	-	M = 1	M = 1
4	-	Skin Sens. 1; H317: C >= 0.05%	-	-
5	-	-	M = 100	-
6	B	Skin Sens. 1A; H317: C >= 0.0015% Eye Irrit. 2; H319: C >= 0.06% Skin Irrit. 2; H315: C >= 0.06% Skin Corr. 1C; H314: C >= 0.6% Eye Dam. 1; H318: C >= 0.6%	M = 100	M = 100
7	-	Skin Sens. 1A; H317: C >= 0.0015%	M = 10	M = 1

Full text for the notes: pls. see section 16 “Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)”.

No	Route, target organ, concrete effect
1	H351i inhalational; -; -
5	H372 -; nervous system; -

Acute toxicity estimate (ATE) values			
No	**oral**	**dermal**	**inhalative**
2	1200 mg/kg bodyweight		

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 attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing media
water jet.

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Toxic pyrolysis products; Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters
Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses. Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Is not allowed to be released into the sewerage or water courses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4 Reference to other sections
No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Due to the organic solvents' content of the mixture: Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet [sanding]/[flatting] should be used wherever possible. Avoid inhalation of dust from sanding. For personal protection see section 8.

General protective and hygiene measures

Avoid skin and eye contact. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Advice on protection against fire and explosion
Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Electrical equipment should be protected to the appropriate standard. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Comply with legal health and safety regulations; Prevent unauthorised access. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Keep away from sources of ignition. No smoking.

Requirements for storage rooms and vessels
Always keep in containers of same material as the original one. Never use pressure to empty: container is not a pressure vessel. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. Observe label precautions.

Incompatible products
Store away from oxidising agents, from strongly alkaline and strongly acid materials.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**	
	List of approved workplace exposure limits (WELs) / EH40				
	Titanium dioxide				
	total inhalable dust				
	WEL long-term (8-hr TWA reference period)	10	mg/m³		
	List of approved workplace exposure limits (WELs) / EH40				
	Titanium dioxide				
	respirable dust				
	WEL long-term (8-hr TWA reference period)	4	mg/m³		
2	**2-butoxyethanol**	**111-76-2**		**203-905-0**	
	2000/39/EC				
	2-Butoxyethanol				
	WEL short-term (15 min reference period)	246	mg/m³	50	ppm
	WEL long-term (8-hr TWA reference period)	98	mg/m³	20	ppm
	Skin resorption / sensibilisation	Skin			
	List of approved workplace exposure limits (WELs) / EH40				
	2-Butoxyethanol				
	WEL short-term (15 min reference period)	246	mg/m³	50	ppm
	WEL long-term (8-hr TWA reference period)	123	mg/m³	25	ppm
	Comments	Sk, BMGV			

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**			**13463-67-7 236-675-5**	
	inhalative	Long term (chronic)	local	1.25	mg/m³
2	**2-butoxyethanol**			**111-76-2 203-905-0**	

	inhalative	Long term (chronic)	systemic	98.00	mg/m³
	inhalative	Short term (acut)	systemic	1091.00	mg/m³
	inhalative	Long term (chronic)	local	246.00	mg/m³
3	**zinc oxide**			**1314-13-2 215-222-5**	
	dermal	Long term (chronic)	systemic	83	mg/kg/day
	with reference to: Zn Comments: insoluble				
	inhalative	Long term (chronic)	systemic	5	mg/m³
	with reference to: Zn Comments: insoluble				
	inhalative	Long term (chronic)	local	0.5	mg/m³
	with reference to: Zn Comments: insoluble				

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**			**13463-67-7 236-675-5**	
	inhalative	Long term (chronic)	local	210	µg/m³
2	**2-butoxyethanol**			**111-76-2 203-905-0**	
	oral	Long term (chronic)	systemic	6.30	mg/kg/day
	oral	Short term (acut)	systemic	26.70	mg/kg/day
	inhalative	Long term (chronic)	systemic	59.00	mg/m³
	inhalative	Short term (acut)	systemic	426.00	mg/m³
	inhalative	Long term (chronic)	local	147.00	mg/m³
3	**zinc oxide**			**1314-13-2 215-222-5**	
	oral	Long term (chronic)	systemic	0.83	mg/kg/day
	with reference to: Zn Comments: insoluble				
	dermal	Long term (chronic)	systemic	83	mg/kg/day
	with reference to: Zn Comments: insoluble				
	inhalative	Long term (chronic)	systemic	2.5	mg/m³
	with reference to: Zn Comments: insoluble				

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**2-butoxyethanol**		**111-76-2 203-905-0**	
	water	fresh water	8.80	mg/L
	water	marine water	0.88	mg/L
	water	fresh water sediment	34.60	mg/kg
	with reference to: dry weight			
	water	marine water sediment	3.46	mg/kg
	water	Aqua intermittent	26.4	mg/L
	soil	-	2.33	mg/kg dry weight
	sewage treatment plant	-	463.00	mg/L
	secondary poisoning	-	0.02	g/kg
2	**zinc oxide**		**1314-13-2 215-222-5**	
	water	fresh water	20.6	µg/L
	with reference to: Zn			
	water	marine water	6.1	µg/L
	with reference to: Zn			
	water	fresh water sediment	117.8	mg/kg

	water	marine water sediment	56.5	mg/kg
	with reference to: Zn, dry weight			
	soil	-	35.6	mg/kg
	with reference to: Zn, dry weight			
	sewage treatment plant	-	100	µg/L

8.2 Exposure controls

Appropriate engineering controls
Provide good ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits. In case of brush application: Filter A2. When applied by spraying: Filter A2P2. (DIN EN 14387)

Eye / face protection
Wear safety googles to protect against splashes. Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	In case of short-term contact / splash protection: nitrile rubber		
Material thickness	>	0.4	mm
Breakthrough time	>	120	min
Appropriate Material	In case of prolonged exposure: nitrile rubber		
Material thickness	>	0.4	mm
Breakthrough time	>	480	min

Other
Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

Environmental exposure controls
Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
liquid

Colour
according to product name

Odour
characteristic

pH value			
Value	8.8	-	9.0

Boiling point / boiling range			
Value	appr.	100	°C

Melting point/freezing point

No data available

Decomposition temperature
No data available

Flash point
Not applicable

Ignition temperature
No data available

Oxidising properties
Not applicable

Flammability
Not applicable

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure				
Value	<		100	hPa
Reference temperature			50	°C

Relative vapour density
No data available

Relative density
No data available

Density				
Value	1.24	-	1.29	g/cm³
Reference temperature			20	°C
Method	DIN 51757			

Solubility in water	
Comments	miscible

Solubility
No data available

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Not applicable			
Source	ECHA		
2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
log Pow		0.81	
Reference temperature		25	°C
Source	ECHA		

Kinematic viscosity				
Value	2500	-	3000	Pa*s
Reference temperature			20	°C
Method	DIN 53019			

Solvent separation test
Not applicable

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Stable under recommended storage and handling conditions (See section 7).

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources.

10.5 Incompatible materials
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products
None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**einzA Aqua All-Grund, weiß**
Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE oral > 2000 mg/kg).

Acute oral toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**
LD50		>	2000	mg/kg bodyweight
Species		rat		
Method		OECD 401		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are not met.		
2	**2-butoxyethanol**	**111-76-2**		**203-905-0**
ATE			1200	mg/kg bodyweight
Species		rat		
Source		1272/2008/EC, Annex VI		
3	**zinc oxide**	**1314-13-2**		**215-222-5**
LD50		>	5000	mg/kg bodyweight
Species		rat		
Method		OECD 401		
Source		ECHA		

Acute dermal toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**2-butoxyethanol**	**111-76-2**		**203-905-0**
LD50		>	2000	mg/kg bodyweight
Species		guinea pig		
Method		OECD 402		
Source		ECHA		
2	**zinc oxide**	**1314-13-2**		**215-222-5**

LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**einzA Aqua All-Grund, weiß**
Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE for inhalation: > 20.000 ppmV (gases), > 20 mg/l (vapours), > 5 mg/l (dusts/mists).

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**	
LC50		5.09	mg/l	
Duration of exposure		4	h	
State of aggregation	Dust			
Species	rat			
Method	OECD 403			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
2	**zinc oxide**	**1314-13-2**	**215-222-5**	
LC50	>	5.7	mg/l	
Duration of exposure		4	h	
State of aggregation	Dust/mist			
Species	rat			
Method	OECD 403			
Source	ECHA			

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Duration of exposure		4	h
Species	rabbit		
Method	EU B.4		
Source	ECHA		
Evaluation	irritant		
3	**zinc oxide**	**1314-13-2**	**215-222-5**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Species	rabbit		
Method	OECD 405		

Source	ECHA
Evaluation	non-irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Duration of exposure		24	h
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	Irritating to eyes		

3	**zinc oxide**	**1314-13-2**	**215-222-5**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		

Respiratory or skin sensitisation

No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		

2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		

3	**zinc oxide**	**1314-13-2**	**215-222-5**
Route of exposure	respiratory tract		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	Skin		
Species	Guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Germ cell mutagenicity

No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Type of examination	In vitro mammalian cytogenicity		
Method	OECD 487		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
Type of examination	In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus		
Species	rat		
Method	OECD 474		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Method	OECD 471		
Source	ECHA		

Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**

Route of exposure	oral		
NOAEL	>=	1000	mg/kg bw/d
Type of examination	Reproductive studies - one generation		
Species	rat		
Method	OECD 443		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
NOAEL		1000	mg/kg bw/d
Type of examination	Prenatal Developmental Toxicity Study		
Species	rat		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**

Route of exposure	oral		
NOEL		7500	mg/kg bw/d
Species	mouse		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Species	rat		
Method	OECD 451		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**

Route of exposure	oral		
NOAEL	>	962	mg/kg bw/d
Species	rat		
Method	OECD 408		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	inhalational		
Species	rat		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Aspiration hazard
No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**

LC50		1474	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**

NOEC	>	100	mg/l
Duration of exposure		21	day(s)
Species	Danio rerio		
Method	OECD 204		
Source	ECHA		

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**

EC50		1550	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**

NOEC		100	mg/l
Duration of exposure		21	day(s)
Species	Daphnia magna		
Method	OECD 211		
Source	ECHA		

Toxicity to algae (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**

EC50	>	100	mg/l
Duration of exposure		72	h

Species	Raphidocelis subcapitata
Method	OECD 201
Source	ECHA
Evaluation/classification	Based on the available data, the classification criteria are not met.

2	2-butoxyethanol	111-76-2	203-905-0
EC50		911	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Source	ECHA		
Evaluation	Not applicable for inorganic substances.		

2	2-butoxyethanol	111-76-2	203-905-0
Type	aerobic biodegradation		
Value		90.4	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation	readily biodegradable		

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Not applicable			
Source	ECHA		

2	2-butoxyethanol	111-76-2	203-905-0
log Pow		0.81	
Reference temperature		25	°C
Source	ECHA		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not allow to enter drains or water courses.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste code	08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer. Empty containers must be scrapped or reconditioned.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

Transport within the user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	75
2	2-butoxyethanol	111-76-2	203-905-0	75
3	pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	223-296-5	75

4	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
This product is not subject to Part 1 or 2 of Annex I.

Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	
VOC content	3.82 %

Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products
relevant VOC limit value as referred to in Annex II of Directive 2004/42/CE , Cat. : i, type: wb = 140 g/l Max. VOC content (limit value) of the product in its ready for use condition = < 140 g/l

National regulations

Other national regulations
Adhere to national regulations for proper handling and use of hazardous materials. Use appropriate personal protective equipment.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

EUH070	Toxic by eye contact.
EUH071	Corrosive to the respiratory tract.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H351i	Suspected of causing cancer by inhalation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid … %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
V	If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≥ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.
W	It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.
1	The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Creation of the safety data sheet
UMCO GmbH
Georg-Wilhelm-Str. 187, D-21107 Hamburg
Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

Prod-ID 653478