SAFETY DATA SHEET

AQUATOP VIRTA 22 - RAL 7022

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

1.1 Product identifier

Product name : AQUATOP VIRTA 22 - RAL 7022

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person responsible for this SDS : Prod-safe@teknos.com

National contact

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : In an emergency, call 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains adipohydrazide and 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
Safety data sheet available on request.
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles :

2.3 Other hazards

SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
2-(2-butoxyethoxy)ethanol	REACH #: 01-2119475104-44 EC: 203-961-6 CAS: 112-34-5 Index: 603-096-00-8	≤3	Eye Irrit. 2, H319	-	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≤3	Carc. 2, H351 (inhalation)	-	[1] [*]
adipohydrazide	REACH #: 01-2119962900-36 EC: 213-999-5 CAS: 1071-93-8	<1	Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
1,2-benzisothiazol-3(2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	<0.036	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 **See Section 16 for the full text of the H statements declared above.**	ATE [Oral] = 450 mg/kg ATE [Inhalation (dusts and mists)] = 0.21 mg/l Skin Sens. 1, H317: C ≥ 0.036% M [Acute] = 1 M [Chronic] = 1	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SECTION 4: First aid measures

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

SECTION 6: Accidental release measures

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with non-combustible, absorbent material e. g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
2-(2-butoxyethoxy)ethanol	**Regulation on Limit Values - MAC (Austria, 4/2021)** TWA 8 hours: 10 ppm. TWA 8 hours: 67.5 mg/m³. PEAK 15 minutes: 15 ppm 4 times per shift. PEAK 15 minutes: 101.2 mg/m³ 4 times per shift.
2-(2-butoxyethoxy)ethanol	**Limit values (Belgium, 12/2023)** STEL 15 minutes: 15 ppm. TWA 8 hours: 10 ppm. TWA 8 hours: 67.5 mg/m³. STEL 15 minutes: 101.2 mg/m³.

2-(2-butoxyethoxy)ethanol	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Limit value 8 hours: 67.5 mg/m³. Limit value 15 minutes: 101.2 mg/m³. Limit value 15 minutes: 15 ppm. Limit value 8 hours: 10 ppm.
2-(2-butoxyethoxy)ethanol	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** STELV 15 minutes: 101.2 mg/m³. STELV 15 minutes: 15 ppm. ELV 8 hours: 67.5 mg/m³. ELV 8 hours: 10 ppm.
2-(2-butoxyethoxy)ethanol	**Department of labour inspection (Cyprus, 7/2021)** STEL 15 minutes: 15 ppm. STEL 15 minutes: 101.2 mg/m³. TWA 8 hours: 10 ppm. TWA 8 hours: 67.5 mg/m³.
2-(2-butoxyethoxy)ethanol	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 101.2 mg/m³. STEL 15 minutes: 15 ppm.
2-(2-butoxyethoxy)ethanol	**Working Environment Authority (Denmark, 3/2024)** TWA 8 hours: 68 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 15 ppm. STEL 15 minutes: 101 mg/m³.
2-(2-butoxyethoxy)ethanol	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** TWA 8 hours: 10 ppm. TWA 8 hours: 67.5 mg/m³.
2-(2-butoxyethoxy)ethanol	**EU OEL (Europe, 1/2022)** TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 101.2 mg/m³. STEL 15 minutes: 15 ppm.
2-(2-butoxyethoxy)ethanol	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** TWA 8 hours: 10 ppm. TWA 8 hours: 68 mg/m³.
2-(2-butoxyethoxy)ethanol	**Ministry of Labor (France, 6/2024)** STEL 15 minutes: 101.2 mg/m³. Notes: Indicative regulatory limit values (decree of 30-06-2004 modified) STEL 15 minutes: 15 ppm. Notes: Indicative regulatory limit values (decree of 30-06-2004 modified) TWA 8 hours: 67.5 mg/m³. Notes: Indicative regulatory limit values (decree of 30-06-2004 modified) TWA 8 hours: 10 ppm. Notes: Indicative regulatory limit values (decree of 30-06-2004 modified)
2-(2-butoxyethoxy)ethanol	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 67 mg/m³. PEAK 15 minutes: 100.5 mg/m³. TWA 8 hours: 10 ppm. PEAK 15 minutes: 15 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. TWA 8 hours: 67 mg/m³. PEAK 15 minutes: 100.5 mg/m³ 4 times per shift [Interval: 1 hour]. TWA 8 hours: 10 ppm. PEAK 15 minutes: 15 ppm 4 times per shift [Interval: 1 hour].

1,2-benzisothiazol-3(2H)-one	**DFG MAC-values list (Germany, 7/2023)** Skin sensitiser.
2-(2-butoxyethoxy)ethanol	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** STEL 15 minutes: 101.2 mg/m³. STEL 15 minutes: 15 ppm. TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm.
2-(2-butoxyethoxy)ethanol	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** TWA 8 hours: 67.5 mg/m³. PEAK 15 minutes: 101.2 mg/m³. PEAK 15 minutes: 15 ppm. TWA 8 hours: 10 ppm.
2-(2-butoxyethoxy)ethanol	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** STEL 15 minutes: 101.2 mg/m³. STEL 15 minutes: 15 ppm. TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm.
2-(2-butoxyethoxy)ethanol	**NAOSH (Ireland, 4/2024)** Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 10 ppm. OELV 15 minutes: 101.2 mg/m³. OELV 8 hours: 67.5 mg/m³. OELV 15 minutes: 15 ppm.
2-(2-butoxyethoxy)ethanol	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Limit value 8 hours: 10 ppm. Limit value 8 hours: 67.5 mg/m³. Short Term 15 minutes: 15 ppm. Short Term 15 minutes: 101.2 mg/m³.
2-(2-butoxyethoxy)ethanol	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** STEL 15 minutes: 101.2 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 15 ppm. TWA 8 hours: 67.5 mg/m³.
2-(2-butoxyethoxy)ethanol	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 101.2 mg/m³. STEL 15 minutes: 15 ppm.
2-(2-butoxyethoxy)ethanol	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** STEL 15 minutes: 15 ppm. STEL 15 minutes: 101.2 mg/m³. TWA 8 hours: 10 ppm. TWA 8 hours: 67.5 mg/m³.
2-(2-butoxyethoxy)ethanol	**EU OEL (Europe, 1/2022)** TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 101.2 mg/m³. STEL 15 minutes: 15 ppm.
2-(2-butoxyethoxy)ethanol	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** Absorbed through skin. TWA 8 hours: 50 mg/m³. STEL 15 minutes: 100 mg/m³. TWA 8 hours: 7.4 ppm. STEL 15 minutes: 14.8 ppm.
2-(2-butoxyethoxy)ethanol	**FOR-2011-12-06-1358 (Norway, 12/2022)** TWA 8 hours: 10 ppm. TWA 8 hours: 68 mg/m³.

2-(2-butoxyethoxy)ethanol	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** TWA 8 hours: 67 mg/m³. STEL 15 minutes: 100 mg/m³.
2-(2-butoxyethoxy)ethanol	**Portuguese Institute of Quality (Portugal, 11/2014)** TWA 8 hours: 10 ppm. Form: Inhalable fraction and vapor.
2-(2-butoxyethoxy)ethanol	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** VLA 8 hours: 67.5 mg/m³. Short term 15 minutes: 101.2 mg/m³. Short term 15 minutes: 15 ppm. VLA 8 hours: 10 ppm.
2-(2-butoxyethoxy)ethanol	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** Inhalation sensitiser. TWA 8 hours: 67.5 mg/m³. STEL 15 minutes: 101.2 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 15 ppm.
2-(2-butoxyethoxy)ethanol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm. KTV 15 minutes: 101.2 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 15 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
2-(2-butoxyethoxy)ethanol	**National institute of occupational safety and health (Spain, 1/2024)** TWA 8 hours: 67.5 mg/m³. TWA 8 hours: 10 ppm. STEL 15 minutes: 15 ppm. STEL 15 minutes: 101.2 mg/m³.
2-(2-butoxyethoxy)ethanol	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** TWA 8 hours: 10 ppm. TWA 8 hours: 68 mg/m³. STEL 15 minutes: 15 ppm. STEL 15 minutes: 101 mg/m³.
2-(2-butoxyethoxy)ethanol	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 67 mg/m³. Form: vapour and aerosols. STEL 15 minutes: 101 mg/m³. Form: vapour and aerosols. STEL 15 minutes: 15 ppm. Form: vapour and aerosols. TWA 8 hours: 10 ppm. Form: vapour and aerosols.
2-(2-butoxyethoxy)ethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** TWA 8 hours: 10 ppm. TWA 8 hours: 67.5 mg/m³. STEL 15 minutes: 15 ppm. STEL 15 minutes: 101.2 mg/m³.

Biological exposure indices

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
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No exposure indices known.	
No exposure indices known.	

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Result

2-(2-butoxyethoxy)ethanol	**DNEL - General population - Long term - Oral** 6.25 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Inhalation** 67.5 mg/m³ Effects: Local **DNEL - Workers - Short term - Inhalation** 101.2 mg/m³ Effects: Local
titanium dioxide	**DNEL - General population - Long term - Inhalation** 28 µg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 170 µg/m³ Effects: Local
adipohydrazide	**DNEL - Workers - Long term - Inhalation** 17.5 mg/m³ Effects: Systemic
1,2-benzisothiazol-3(2H)-one	**DNEL - General population - Long term - Dermal** 0.345 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Dermal** 0.966 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 1.2 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 6.81 mg/m³ Effects: Systemic

PNECs

Not available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

SECTION 8: Exposure controls/personal protection

Recommendations : Wear suitable gloves tested to EN374.

> 8 hours (breakthrough time): Nitrile gloves. thickness > 0.3 mm

Not recommended polyvinyl alcohol (PVA) gloves

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type (spray application): A P

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Dark grey.

Odour : Slight

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range :

Ingredient name	°C	°F	Method
water	100	212	
2-(2-butoxyethoxy)ethanol	225 to 227.6	437 to 441.7	

Flammability : Not available.

Lower and upper explosion limit : Lower: Not applicable.
Upper: Not applicable.

Flash point : Closed cup: >100°C (>212°F)

Auto-ignition temperature :

Ingredient name	°C	°F	Method
2-(2-butoxyethoxy)ethanol	210	410	DIN 51794

Decomposition temperature : Not available.

pH : 8 to 8.5 [Conc. (% w/w): 100%]

Viscosity : Not available.

Solubility(ies) :

Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure :

SECTION 9: Physical and chemical properties

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
water	17.5	2.3				
2-(2-butoxyethoxy)ethanol	0.022	0.0029				

Relative density : Not available.

Density : 1.1 g/cm³

Vapour density : Not available.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties : Not available.

Oxidising properties : Not available.

9.2.2 Other safety characteristics

Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result
2-(2-butoxyethoxy)ethanol	**Rabbit - Dermal - LD50** 2700 mg/kg **Rat - Oral - LD50** 4500 mg/kg Toxic effects: Behavioral - Tetany Lung, Thorax, or Respiration - Dyspnea Liver - Other changes
1,2-benzisothiazol-3(2H)-one	**Rat - Oral - LD50** 1020 mg/kg

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
AQUATOP VIRTA 22	N/A	N/A	N/A	720.7	N/A
2-(2-butoxyethoxy)ethanol	4500	2700	N/A	N/A	N/A
1,2-benzisothiazol-3(2H)-one	450	N/A	N/A	N/A	0.21

Skin corrosion/irritation

Product/ingredient name	Result
titanium dioxide	**Human - Skin - Mild irritant** Duration of treatment/exposure: 72 hours Amount/concentration applied: 300 ug I
1,2-benzisothiazol-3(2H)-one	**Human - Skin - Mild irritant** Duration of treatment/exposure: 48 hours Amount/concentration applied: 5 %

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
2-(2-butoxyethoxy)ethanol	**Rabbit - Eyes - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 20 mg **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 20 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
2-(2-butoxyethoxy)ethanol	**Acute - LC50 - Fresh water** Fish - Bluegill - *Lepomis macrochirus* Size: 33 to 75 mm 1300000 µg/l [96 hours] Effect: Mortality
titanium dioxide	**Acute - LC50 - Marine water** Fish - Mummichog - *Fundulus heteroclitus* >1000000 µg/l [96 hours] Effect: Mortality **Acute - LC50 - Fresh water** Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate Age: <24 hours 3 mg/l [48 hours] Effect: Mortality
1,2-benzisothiazol-3(2H)-one	**Acute - LC50 - Fresh water** OECD [Fish, Acute Toxicity Test] Fish - Trout - *Onorhynchus Mykiss* 1.9 mg/l [96 hours] **Acute - EC50** OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test] Daphnia - Daphnia - *Daphnia Magna* 3.7 mg/l [48 hours] **Acute - EC50 - Marine water** OECD 201 [Alga, Growth Inhibition Test] Algae - Algae - *Skeletonema Costatum* 0.36 mg/l [72 hours] **Acute - NOEC - Marine water** OECD 201 [Alga, Growth Inhibition Test] Algae - Algae - *Skeletonema Costatum* 0.15 mg/l [72 hours]

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Product/ingredient name	Result
1,2-benzisothiazol-3(2H)-one	EU 24% [28 days]

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
1,2-benzisothiazol-3(2H)-one	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
2-(2-butoxyethoxy)ethanol	1	-	Low
1,2-benzisothiazol-3(2H)-one	-	3.2	Low

12.4 Mobility in soil

Soil/water partition coefficient

SECTION 12: Ecological information

Product/ingredient name	logKoc	Koc
2-(2-butoxyethoxy)ethanol	1.56	36.5981
adipohydrazide	1.74	55.2165
1,2-benzisothiazol-3(2H)-one	1.86	73.142

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
2-(2-butoxyethoxy)ethanol	No	No	No	No	No	No	No
titanium dioxide	No	No	No	No	No	No	No
adipohydrazide	No	No	No	No	No	No	No
1,2-benzisothiazol-3(2H)-one	No	No	No	No	No	No	No

Mobility : Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
2-(2-butoxyethoxy)ethanol	No	No	No	No	No	No	No
titanium dioxide	No	No	No	No	No	No	No
adipohydrazide	No	No	No	No	No	No	No
1,2-benzisothiazol-3(2H)-one	No	No	No	No	No	No	No

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
2-(2-butoxyethoxy)ethanol	No	No	No	No	No	No	No
titanium dioxide	No	No	No	No	No	No	No
adipohydrazide	No	No	No	No	No	No	No
1,2-benzisothiazol-3(2H)-one	No	No	No	No	No	No	No

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

European waste catalogue (EWC) : 080112

Packaging

SECTION 13: Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within 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/applicable due to nature of the product.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
2-(2-butoxyethoxy)ethanol	≤3	55 [Consumer paint]

Labelling :

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

SECTION 15: Regulatory information

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Austria

Limitation of the use of organic solvents : Permitted.

Belgium

Book VI carcinogenic agents annex VI.2-1 - VI.2-3

Ingredient name	Status
Noirs de charbon	Listed

Czech Republic

Storage code : IV

Denmark

Fire class : IV-1

Executive Order No. 1795/2015

Ingredient name	Annex I Section A	Annex I Section B
titanium dioxide	Listed	-
carbon black respirable	Listed	-

MAL-code : 00-1

Protection based on MAL : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

General: Gloves must be worn for all work that may result in soiling. Apron/ coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, respiratory protection with air supply and arm protectors/apron/coveralls/protective clothing must be worn as appropriate or as instructed.

MAL-code: 00-1

Application: When spraying in existing* spray booths, if the operator is outside the spray zone.

- Arm protectors must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied half mask, coveralls and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

Low-boiling liquids : This product contains low-boiling point liquids. Any respiratory protective equipment should be air-fed.

Restrictions on use : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

List of undesirable substances : Not listed

Carcinogenic waste : Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks.

Finland

France

Social Security Code, Articles L 461-1 to L 461-7 : 2-(2-butoxyethoxy)ethanol RG 84

Reinforced medical surveillance : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

Germany

Storage class (TRGS 510) : 10

Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

Hazard class for water : 1

Technical instruction on air quality control (TA Luft)

Number [Class]	Description	%
5.2.1	Total dust	6.2
5.2.4 [III]	Gaseous inorganic substances	0.068
5.2.5	Organic substances	32.7
5.2.5 [I]	Organic substances	2.2

AOX : The product contains organically bound halogens and can contribute to the AOX value in waste water.

Italy

D.Lgs. 152/06 : Not determined.

Netherlands

Water Discharge Policy (ABM) : A(4) Low hazard for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

Norway

Sweden

Switzerland

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

SECTION 15: Regulatory information

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

Full text of abbreviated H statements

H302	Harmful if swallowed.
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.
H351	Suspected of causing cancer.
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.

Full text of classifications [CLP/GHS]

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A

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Notice to reader

SECTION 16: Other information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.