

SAFETY DATA SHEET



TEKNOCOAT AQUA 1878-23 - All variants

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

1.1 Product identifier

Product name : TEKNOCOAT AQUA 1878-23 - All variants

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, 2-mercaptoethanol, 1,2-benzisothiazol-3(2H)-one and reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Safety data sheet available on request.

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

2.3 Other hazards

Date of issue/Date of revision : 06/10/2023 Date of previous issue : 01/07/2016 Version : 1.04 1/19

TEKNOCOAT AQUA 1878-23 - All variants

Label No : 50871

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-Butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0	≤3	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	ATE [Oral] = 1200 mg/kg ATE [Inhalation (vapours)] = 3 mg/l	[1] [2]
3-Butoxypropan-2-ol	REACH #: 01-2119475527-28 EC: 225-878-4 CAS: 5131-66-8 Index: 603-052-00-8	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319	-	[1]
adipohydrazide	REACH #: 01-2119962900-36 EC: 213-999-5 CAS: 1071-93-8	<1	Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
2-mercaptoethanol	EC: 200-464-6 CAS: 60-24-2	<0.1	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 2, H361 STOT RE 2, H373 Aquatic Acute 1, H400	ATE [Oral] = 244 mg/kg ATE [Dermal] = 50 mg/kg ATE [Inhalation (vapours)] = 3 mg/l M [Acute] = 1	[1]
1,2-benzisothiazol-3(2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	<0.05	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	ATE [Oral] = 1020 mg/kg Skin Sens. 1, H317: C ≥ 0.05% M [Acute] = 1	[1]
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS: 55965-84-9 Index: 613-167-00-5	<0.0015	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 53 mg/kg ATE [Dermal] = 50 mg/kg ATE [Inhalation (vapours)] = 0.5 mg/l Skin Corr. 1C, H314: C ≥ 0.6% Eye Dam. 1, H318: C ≥ 0.6% Eye Irrit. 2, H319: 0.06% ≤ C < 0.6% Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 100 M [Chronic] = 100	[1]

Date of issue/Date of revision : 06/10/2023 **Date of previous issue** : 01/07/2016 **Version** : 1.04 2/19

FEKNOCOAT AQUA 1878-23 - All variants

Label No : 50871

SECTION 3: Composition/information on ingredients

See Section 16 for the full text of the H statements declared above.

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

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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- 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** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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
nitrogen oxides

SECTION 5: Firefighting measures

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).

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry 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. 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. Dispose of via a licensed waste disposal contractor.

- 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.

SECTION 7: Handling and storage

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-Butoxyethanol	GKV_MAK (Austria, 12/2011). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. PEAK: 40 ppm, 4 times per shift, 30 minutes. PEAK: 200 mg/m ³ , 4 times per shift, 30 minutes.
2-Butoxyethanol	Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	България Министерство на труда и социалната политика и Министерството на здравеопазването (Bulgaria, 1/2012). Absorbed through skin. Limit value 8 hours: 98 mg/m ³ 8 hours. Limit value 15 min: 246 mg/m ³ 15 minutes. Limit value 15 min: 50 ppm 15 minutes. Limit value 8 hours: 20 ppm 8 hours.
2-Butoxyethanol	MinGoRP GVI/KGVI (Croatia, 6/2013). Absorbed through skin. STELV: 246 mg/m ³ 15 minutes. STELV: 50 ppm 15 minutes. ELV: 98 mg/m ³ 8 hours. ELV: 20 ppm 8 hours.
No exposure limit value known.	
2-Butoxyethanol	NVCR PEL/NPK-P (Czech Republic, 1/2013). Absorbed through skin. TWA: 100 mg/m ³ 8 hours. TWA: 20.7 ppm 8 hours. STEL: 200 mg/m ³ 15 minutes. STEL: 41.4 ppm 15 minutes.
3-Butoxypropan-2-ol	NVCR PEL/NPK-P (Czech Republic, 1/2013). Absorbed through skin. STEL: 550 mg/m ³ 15 minutes. TWA: 270 mg/m ³ 8 hours. TWA: 49.95 ppm 8 hours. STEL: 101.75 ppm 15 minutes.
2-Butoxyethanol	Working Environment Authority (Denmark, 6/2022). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 246 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
2-Butoxyethanol	Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008). Absorbed through skin. Skin sensitiser. TWA: 98 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. STEL: 246 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.

SECTION 8: Exposure controls/personal protection

2-Butoxyethanol	EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 250 mg/m ³ 15 minutes.
2-Butoxyethanol	Ministère du travail (France, 7/2012). Absorbed through skin. Notes: Labour Act , Art 4412-149 (Regulatory binding exposure limits) TWA: 10 ppm 8 hours. TWA: 49 mg/m ³ 8 hours. STEL: 246 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
2-Butoxyethanol	TRGS900 AGW (Germany, 11/2015). Absorbed through skin. TWA: 49 mg/m ³ 8 hours. PEAK: 196 mg/m ³ 15 minutes. TWA: 10 ppm 8 hours. PEAK: 40 ppm 15 minutes.
2-Butoxyethanol	Υπουργείο Εργασίας και Κοινωνικών Υποθέσεων (Greece, 2/2012). Absorbed through skin. TWA: 25 ppm 8 hours. TWA: 120 mg/m ³ 8 hours.
2-Butoxyethanol	25/2000. (IX. 30.) EüM-SzCsM együttes rendelet (Hungary, 12/2011). Absorbed through skin. TWA: 98 mg/m ³ 8 hours. PEAK: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). Absorbed through skin. STEL: 246 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 100 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
2-Butoxyethanol	NAOSH (Ireland, 12/2011). Absorbed through skin. OELV-8hr: 20 ppm 8 hours. OELV-8hr: 98 mg/m ³ 8 hours. OELV-15min: 50 ppm 15 minutes. OELV-15min: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	Ministry of Labour and Social Policy (Italy, 10/2013). Absorbed through skin. 8 hours: 20 ppm 8 hours. 8 hours: 98 mg/m ³ 8 hours. Short Term: 50 ppm 15 minutes. Short Term: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	Ministers Cabinet Regulations Nr.325 - AER (Latvia, 2/2021). Absorbed through skin. TWA: 98 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007). Absorbed through skin. TWA: 50 mg/m ³ 8 hours. TWA: 10 ppm 8 hours. STEL: 100 mg/m ³ 15 minutes. STEL: 20 ppm 15 minutes.
No exposure limit value known.	

SECTION 8: Exposure controls/personal protection

No exposure limit value known.	
2-Butoxyethanol	MinSZW Wettelijke Grenswaarden (Netherlands, 12/2014). Absorbed through skin. OEL, 8-h TWA: 100 mg/m ³ 8 hours. STEL, 15-min: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Notes: indicative limit value TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours.
2-Butoxyethanol	Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz.U. 2014 poz. 817) (Poland, 6/2014). TWA: 98 mg/m ³ 8 hours. STEL: 200 mg/m ³ 15 minutes.
2-Butoxyethanol	Portuguese Institute of Quality (Portugal, 11/2014). TWA: 20 ppm 8 hours.
2-Butoxyethanol	HG 1218/2006 cu modificările și completările ulterioare (Romania, 1/2012). Absorbed through skin. Short term: 50 ppm 15 minutes. VLA: 98 mg/m ³ 8 hours. VLA: 20 ppm 8 hours. Short term: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	Government regulation SR c. 355/2006 (Slovakia, 9/2020). Absorbed through skin. TWA: 98 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. STEL: 246 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
2-Butoxyethanol	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Slovenia, 6/2015). Absorbed through skin. TWA: 98 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. KTV: 245 mg/m ³ , 4 times per shift, 15 minutes. KTV: 50 ppm, 4 times per shift, 15 minutes.
2-Butoxyethanol	INSHT (Spain, 1/2015). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 245 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
2-Butoxyethanol	AFS 2015:7 (Sweden, 12/2015). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes.
2-Butoxyethanol	SUVA (Switzerland, 1/2016). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 49 mg/m ³ 8 hours. STEL: 20 ppm 15 minutes. STEL: 98 mg/m ³ 15 minutes.
No exposure limit value known.	

Biological exposure indices

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.	

SECTION 8: Exposure controls/personal protection

No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.

2-Butoxyethanol

No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.
No exposure indices known.

Portuguese Institute of Quality (Portugal, 11/2014)

BEI: 200 mg/g creatinine, butoxyacetic acid (BAA) [in urine].
Sampling time: end of shift.

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	Type	Exposure	Value	Population	Effects
2-Butoxyethanol	DNEL	Long term Oral	6.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	26.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	59 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	98 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m ³	General population	Local

SECTION 8: Exposure controls/personal protection

3-Butoxypropan-2-ol	DNEL	Short term Inhalation	246 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	426 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	1091 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	147 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	22 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	43 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	52 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	50 %	General population	Local
	DNEL	Long term Dermal	50 %	General population	Local
adipohydrazide	DNEL	Short term Dermal	50 %	Workers	Local
	DNEL	Long term Dermal	50 %	Workers	Local
	DNEL	Long term Inhalation	17.5 mg/m ³	Workers	Systemic
2-mercaptoethanol	DNEL	Short term Oral	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.05 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.05 mg/kg bw/day	Workers	Systemic
1,2-benzisothiazol-3(2H)-one	DNEL	Short term Inhalation	0.17 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.17 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.345 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.966 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.2 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	6.81 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.02 mg/m ³	General population	Local
	DNEL	Long term Inhalation	0.02 mg/m ³	Workers	Local
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	DNEL	Short term Inhalation	0.04 mg/m ³	General population	Local
	DNEL	Short term Inhalation	0.04 mg/m ³	Workers	Local
	DNEL	Long term Oral	0.09 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.11 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.11 mg/kg bw/day	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

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.

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): 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 : Various

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	IP 123-93
2-Butoxyethanol	171 to 171.5	339.8 to 340.7	

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 :

Date of issue/Date of revision : 06/10/2023 **Date of previous issue** : 01/07/2016

Version : 1.04 10/19

FEKNOCOAT AQUA 1878-23 - All variants

Label No : 50871

SECTION 9: Physical and chemical properties

Ingredient name	°C	°F	Method
2-Butoxyethanol	230	446	DIN 51794
3-Butoxypropan-2-ol	260	500	EU A.15

Decomposition temperature : ☒ Not available.

pH : ☒ 8 to 8.7

Viscosity : ☒ Not available.

Solubility(ies) :

Not available.

Solubility in water : ☒ Not available.

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

Vapour pressure :

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				
3-Butoxypropan-2-ol	1.05	0.14	OECD 104			

Relative density : ☒ Not available.

Density : ☒ g/cm³

Vapour density : ☒ Not available.

Explosive properties : ☒ Not available.

Oxidising properties : ☒ Not available.

Particle characteristics

Median particle size : ☒ 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

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
3-Butoxypropan-2-ol	LD50 Dermal	Rabbit	3100 mg/kg	-
2-mercaptoethanol	LD50 Oral	Rat	244 mg/kg	-
1,2-benzisothiazol-3(2H)-one	LD50 Oral	Rat	1020 mg/kg	-
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	LD50 Oral	Rat	53 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Route	ATE value
Oral	73634.4 mg/kg
Inhalation (vapours)	184.09 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-Butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
3-Butoxypropan-2-ol	Skin - Moderate irritant	Rabbit	-	-	-
2-mercaptoethanol	Eyes - Severe irritant	Rabbit	-	2 mg	-
1,2-benzisothiazol-3(2H)-one	Skin - Mild irritant	Human	-	48 hours 5 %	-
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Skin - Severe irritant	Human	-	0.01 %	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Sensitisation

Conclusion/Summary : Based on available data, the classification criteria are not met.

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
2-mercaptoethanol	Category 2	-	-

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

SECTION 11: Toxicological information

Potential acute health effects

Eye contact	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Inhalation	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Skin contact	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Ingestion	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: <input checked="" type="checkbox"/> No specific data.
Inhalation	: <input checked="" type="checkbox"/> No specific data.
Skin contact	: <input checked="" type="checkbox"/> No specific data.
Ingestion	: <input checked="" type="checkbox"/> No specific data.

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

Short term exposure

Potential immediate effects	: <input checked="" type="checkbox"/> Not available.
Potential delayed effects	: <input checked="" type="checkbox"/> Not available.

Long term exposure

Potential immediate effects	: <input checked="" type="checkbox"/> Not available.
Potential delayed effects	: <input checked="" type="checkbox"/> Not available.

Potential chronic health effects

Not available.

Conclusion/Summary	: <input checked="" type="checkbox"/> Not available.
General	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Carcinogenicity	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Mutagenicity	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Reproductive toxicity	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

☒ Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-Butoxyethanol 1,2-benzisothiazol-3(2H)-one	Acute EC50 >1000 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - <i>Crangon crangon</i>	48 hours
	Acute LC50 1250000 µg/l Marine water	Fish - <i>Menidia beryllina</i>	96 hours
	Acute EC50 0.36 mg/l Marine water	Algae - <i>Skeletonema Costatum</i>	72 hours
	Acute EC50 3.7 mg/l	Daphnia - <i>Daphnia Magna</i>	48 hours
	Acute LC50 1.9 mg/l Fresh water	Fish - <i>Onorhynchus Mykiss</i>	96 hours
	Acute NOEC 0.15 mg/l Marine water	Algae - <i>Skeletonema Costatum</i>	72 hours

Conclusion/Summary : ☒ Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

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

Conclusion/Summary : ☒ This product has not been tested for biodegradation.

SECTION 12: Ecological information

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-Butoxyethanol	0.81	-	Low
3-Butoxypropan-2-ol	1.2	-	Low
2-mercaptoethanol	-0.056	-	Low
1,2-benzisothiazol-3(2H)-one	-	3.2	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

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.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

European waste catalogue (EWC) : 080112

Packaging

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

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

Labelling :

Other EU regulations

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

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

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

SECTION 15: Regulatory information

This product is not controlled under the Seveso Directive.

National regulations

Austria

VbF class : Not regulated.

Limitation of the use of organic solvents : Permitted.

Czech Republic

Storage code : W

Denmark

Danish fire class : V-1

MAL-code : 0-1

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, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 0-1

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

- Arm protectors must be worn.

During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone.

- Gas filter mask 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.

- Full mask with combined filter, 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.

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

Finland

SECTION 15: Regulatory information

France

Social Security Code, Articles L 461-1 to L 461-7 : 2-Butoxyethanol

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

Hazard class for water : 2 Appendix No. 4

Technical instruction on air quality control : 1A-Luft Number 5.2.5: 41.2%

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

Italy

D.Lgs. 152/06 : Not classified.

Netherlands

Water Discharge Policy (ABM) : Slightly harmful to aquatic organisms. Contains substances that are harmful to the aquatic environment. Abatement effort: A

Norway

Sweden

Switzerland

VOC content : VOC (w/w): 3.129694155%

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

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

Date of issue/Date of revision : 06/10/2023 Date of previous issue : 01/07/2016

Version : 1.04 17/19

TEKNOCOAT AQUA 1878-23 - All variants

Label No : 50871

SECTION 16: Other information

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

Not classified.

[Full text of abbreviated H statements](#)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal 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.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause 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.
EUH071	Corrosive to the respiratory tract.

[Full text of classifications \[CLP/GHS\]](#)

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
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
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Date of issue/ Date of revision : 06/10/2023

Date of previous issue : 01/07/2016

Version : 1.04

 TEKNOCOAT AQUA 1878-23

 All variants

[Notice to reader](#)

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.

