



Titan Sanitizer

Revision: 2022-07-31

Version: 03.2

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

1.1 Product identifier

Trade name: Titan Sanitizer

UFI: JF27-F0SQ-F00T-FXWP

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

Product use: Hard surface cleaner.
Surface disinfectant.
For professional use only.

Uses advised against: Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_2
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssebroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

EUH031
Eye Irrit. 2 (H319)
Aquatic Chronic 2 (H411)

2.2 Label elements



Signal word: Warning.

Hazard statements:

H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.
EUH031 - Contact with acids liberates toxic gas.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Titan Sanitizer

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sodium dichloroisocyanurate, dihydrate	220-767-7	-	[6]	EUH031 Acute Tox. 4 (H302) STOT SE 3 (H335) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Aquatic Chronic 2 (H411)		3-10
sodium alkylbenzenesulphonate	270-115-0	68411-30-3	01-2119489428-22	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		3-10
sodium silicate	215-687-4	1344-09-8	01-2119448725-31	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		3-10

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	May cause bronchospasm in chlorine sensitive individuals.
Skin contact:	No known effects or symptoms in normal use.
Eye contact:	Causes severe irritation.
Ingestion:	No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Collect mechanically. Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

Titan Sanitizer

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Avoid contact with eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Comah - Lower Tier requirements (tonnes): 200

Comah - Upper Tier requirements (tonnes): 500

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium dichloroisocyanurate, dihydrate	-	-	-	1.15
sodium alkylbenzenesulphonate	-	-	-	0.425
sodium silicate	-	-	-	0.8

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium dichloroisocyanurate, dihydrate	-	-	-	2.3
sodium alkylbenzenesulphonate	-	-	-	119
sodium silicate	No data available	-	No data available	1.59

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium dichloroisocyanurate, dihydrate	-	-	-	1.15
sodium alkylbenzenesulphonate	-	-	-	42.5
sodium silicate	No data available	-	No data available	0.8

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium dichloroisocyanurate, dihydrate	-	-	-	8.11
sodium alkylbenzenesulphonate	-	-	-	6
sodium silicate	-	-	-	5.61

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium dichloroisocyanurate, dihydrate	-	-	-	8.11
sodium alkylbenzenesulphonate	-	-	-	6
sodium silicate	-	-	-	5.61

Titan Sanitizer

sodium dichloroisocyanurate, dihydrate	-	-	-	1.99
sodium alkylbenzenesulphonate	-	-	-	1.5
sodium silicate	-	-	-	1.38

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium dichloroisocyanurate, dihydrate	0.00017	1.52	0.0017	0.59
sodium alkylbenzenesulphonate	0.268	0.0268	0.0167	3.43
sodium silicate	7.5	1	7.5	348

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
sodium dichloroisocyanurate, dihydrate	7.56	-	0.756	-
sodium alkylbenzenesulphonate	8.1	6.8	35	-
sodium silicate	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_2	PW	PROC 8a	60	ERC8a

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 2

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Physical state: Solid
Colour: Blue
Odour: Chlorine
Odour threshold: Not applicable
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined

Method / remark

Not relevant to classification of this product
 Not applicable to solids or gases

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium dichloroisocyanurate, dihydrate	Product decomposes before boiling	Read across	
sodium alkylbenzenesulphonate	No data available		
sodium silicate	> 100	Method not given	

Method / remark

Flammability (solid, gas): Not determined
Flammability (liquid): Not applicable.
Flash point (°C): Not applicable.
Sustained combustion: Not applicable.
 (UN Manual of Tests and Criteria, section 32, L.2)
Lower and upper explosion limit/flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: Not applicable
Dilution pH: ≈ 11 (2 %)
Kinematic viscosity: Not determined
Solubility in / Miscibility with water: Soluble

ISO 4316
 Not applicable to solids or gases

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium dichloroisocyanurate, dihydrate	248.2	Read across	25
sodium alkylbenzenesulphonate	> 250		
sodium silicate	Soluble	Method not given	20

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark**Vapour pressure:** Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium dichloroisocyanurate, dihydrate	0.006	Read across	20
sodium alkylbenzenesulphonate	No data available		
sodium silicate	No data available		

Method / remark

Relative density: ≈ 1.05 (20 °C)
Relative vapour density: No data available.
Particle characteristics: Not determined.

OECD 109 (EU A.3)
 Not applicable to solids
 Not relevant to classification of this product.

9.2 Other information**9.2.1 Information with regard to physical hazard classes**

Explosive properties: Not explosive.
Oxidising properties: Not oxidising.
Corrosion to metals: Not determined

Not applicable to solids or gases

9.2.2 Other safety characteristics

No other relevant information available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

Titan Sanitizer

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Reacts with acids. Reacts with acids releasing toxic chlorine gas.

10.6 Hazardous decomposition products

Chlorine.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

Eye irritation and corrosivity

Result: Eye irritant 2 **Method:** OECD 438

Substance data, where relevant and available, are listed below:.

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium dichloroisocyanurate, dihydrate	LD ₅₀	1671	Rat	EPA OPP 81-1		11000
sodium alkylbenzenesulphonate	LD ₅₀	1080	Rat	OECD 401 (EU B.1)		11000
sodium silicate	LD ₅₀	3400	Rat	Method not given		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium dichloroisocyanurate, dihydrate	LD ₅₀	> 5000	Rat	EPA OPP 81-2		Not established
sodium alkylbenzenesulphonate	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)		Not established
sodium silicate	LD ₅₀	> 5000	Rat	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	LC ₅₀	> 0.27	Rat	OECD 403 (EU B.2)	4
sodium alkylbenzenesulphonate		No data available			
sodium silicate	LC ₅₀	> 2.06 No mortality observed	Rat	Non guideline test	

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
sodium dichloroisocyanurate, dihydrate	Not established	Not established	Not established	Not established
sodium alkylbenzenesulphonate	Not established	Not established	Not established	Not established
sodium silicate	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium dichloroisocyanurate, dihydrate	Not irritant		Method not given	
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	
sodium silicate	Irritant		Method not given	

Titan Sanitizer

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium dichloroisocyanurate, dihydrate	Irritant		Method not given	
sodium alkylbenzenesulphonate	Corrosive	Rabbit	OECD 405 (EU B.5)	
sodium silicate	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium dichloroisocyanurate, dihydrate	Irritating to respiratory tract			
sodium alkylbenzenesulphonate	Not irritating to respiratory tract			
sodium silicate	Irritating to respiratory tract		Method not given	

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	Not sensitising	Guinea pig	OECD 429 (EU B.42)	
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sodium silicate	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium dichloroisocyanurate, dihydrate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium silicate	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium dichloroisocyanurate, dihydrate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 475 (EU B.11)
sodium alkylbenzenesulphonate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476 OECD 473	No data available	
sodium silicate	No evidence for mutagenicity, negative test results		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium dichloroisocyanurate, dihydrate	No evidence for carcinogenicity, negative test results
sodium alkylbenzenesulphonate	No data available
sodium silicate	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium dichloroisocyanurate, dihydrate	NOAEL	Developmental toxicity	190	Rat	OECD 416, (EU B.35), oral		
sodium alkylbenzenesulphonate	NOAEL	Teratogenic effects	300	Rat	Non guideline test		No known significant effects or critical hazards
sodium silicate			No data available				No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium dichloroisocyanurate, dihydrate	NOAEL	115	Rat	Method not given	28	
sodium alkylbenzenesulphonate		No data available				
sodium silicate	NOAEL	> 159	Rat	Method not given	180	No effects observed

Sub-chronic dermal toxicity

Titan Sanitizer

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium dichloroisocyanurate, dihydrate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium silicate		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium dichloroisocyanurate, dihydrate	NOAEL	> 31	Rat	Method not given	28	
sodium alkylbenzenesulphonate		No data available				
sodium silicate		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium dichloroisocyanurate, dihydrate	Oral	NOAEL	1523	Mouse	OECD 453 (EU B.33)	24 month(s)		
sodium alkylbenzenesulphonate			No data available					
sodium silicate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium dichloroisocyanurate, dihydrate	Respiratory tract
sodium alkylbenzenesulphonate	No data available
sodium silicate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium dichloroisocyanurate, dihydrate	No data available
sodium alkylbenzenesulphonate	No data available
sodium silicate	Not applicable

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	LC ₅₀	0.23	<i>Lepomis macrochirus</i>	Method not given	96
sodium alkylbenzenesulphonate	LC ₅₀	1.67	Fish	EPA-OPPTS 850.1075	96
sodium silicate	LC ₅₀	1108	<i>Brachydanio</i>	Method not given	96

Titan Sanitizer

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Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	EC ₅₀	0.21	<i>Daphnia magna Straus</i>	ASTM draft method	48
sodium alkylbenzenesulphonate	LC ₅₀	2.9	<i>Daphnia</i>	OECD 202 (EU C.2)	48
sodium silicate	EC ₅₀	1700	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	EC ₅₀	< 0.5	<i>Scenedesmus obliquus</i>	Non guideline test	3
sodium alkylbenzenesulphonate	E _b C ₅₀	47.3	<i>Not specified</i>	Non guideline test	72
sodium silicate	EC ₅₀	207	<i>Desmodesmus subspicatus</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium dichloroisocyanurate, dihydrate		No data available			
sodium alkylbenzenesulphonate		No data available			
sodium silicate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium dichloroisocyanurate, dihydrate	EC ₅₀	51		OECD 209	3 hour(s)
sodium alkylbenzenesulphonate	EC ₅₀	550	<i>Bacteria</i>	OECD 209	3 hour(s)
sodium silicate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium dichloroisocyanurate, dihydrate	NOEC	1000	<i>Oncorhynchus mykiss</i>	OECD 215	28 day(s)	
sodium alkylbenzenesulphonate	NOEC	0.23	<i>Oncorhynchus mykiss</i>	Method not given	72 day(s)	
sodium silicate	NOEC	348	<i>Brachydanio rerio</i>	Method not given	96 hour(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium dichloroisocyanurate, dihydrate	NOEC	160	<i>Daphnia magna</i>	OECD 211	21 day(s)	
sodium alkylbenzenesulphonate	NOEC	1.41	<i>Daphnia magna</i>	OECD 211		
sodium silicate		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium dichloroisocyanurate, dihydrate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium silicate		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed

Titan Sanitizer

sodium dichloroisocyanurate, dihydrate	NOEC	1000	<i>Eisenia fetida</i>	OECD 207	14	
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Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium dichloroisocyanurate, dihydrate		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium dichloroisocyanurate, dihydrate		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium dichloroisocyanurate, dihydrate		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium dichloroisocyanurate, dihydrate		No data available				

12.2 Persistence and degradability**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium dichloroisocyanurate, dihydrate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium dichloroisocyanurate, dihydrate	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
sodium dichloroisocyanurate, dihydrate		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium dichloroisocyanurate, dihydrate		Oxygen depletion	2 % in 28d day(s)	OECD 301D	Not readily biodegradable.
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	85 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium silicate					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium dichloroisocyanurate, dihydrate					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium dichloroisocyanurate, dihydrate					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium dichloroisocyanurate, dihydrate	-0.0056	Method not given	No bioaccumulation expected	

Titan Sanitizer

sodium alkylbenzenesulphonate	3.32	Method not given	Low potential for bioaccumulation	
sodium silicate	No data available		Low potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium dichloroisocyanurate, dihydrate	No data available				
sodium alkylbenzenesulphonate	2-1000		Method not given	High potential for bioaccumulation	
sodium silicate	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium dichloroisocyanurate, dihydrate	No data available				
sodium alkylbenzenesulphonate	No data available				
sodium silicate	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue:

20 01 29* - detergents containing dangerous substances.

Empty packaging

Recommendation:

Dispose of observing national or local regulations.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 3077

14.2 UN proper shipping name:

Environmentally hazardous substance, solid, n.o.s. (sodium dichloroisocyanurate dihydrate)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 9

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code: M7

Tunnel restriction code: -

Titan Sanitizer

Hazard identification number: 90

IMO/IMDG

EmS: F-A, S-F

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for dangerous goods packed in small quantities classified under UN3077 or UN3082.

SECTION 15: Regulatory information

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

National regulations :

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 648/2004 - Detergents regulation (UK amended)
- Biocidal Products Regulations 2001 (SI 2001/880)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to Detergents Regulation

phosphates	15 - 30 %
anionic surfactants, chlorine-based bleaching agents, non-ionic surfactants	< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Comah - classification: E2 - Hazardous to the Aquatic Environment in Category Chronic 2

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

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Reason for revision:

This data sheet contains changes from the previous version in section(s):, 1, 3, 4, 6, 7, 8, 10, 15, 16, Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- 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.
- H412 - Harmful to aquatic life with long lasting effects.
- EUH031 - Contact with acids liberates toxic gas.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage

Titan Sanitizer

- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet