



Titan Chlor Plus Tablets

Revision: 2023-07-03

Version: 03.0

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

1.1 Product identifier

Trade name: Titan Chlor Plus Tablets

UFI: UAM0-N0VC-H008-H6K9

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

Product use: Hard surface cleaner.
Surface disinfectant.
for general surface disinfection
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, Maarssenbroeksedijk 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
STOT SE 3 (H335)
Eye Irrit. 2 (H319)
Aquatic Acute 1 (H400)
Aquatic Chronic 1 (H410)
Acute Tox. 4 (H332)

2.2 Label elements



Signal word: Warning.

Contains troclosene sodium (Troclosene Sodium), sodium N-lauroyl sarcosinate (Sodium Lauroyl Sarcosinate)

Hazard statements:

H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H410 - Very toxic to aquatic life with long lasting effects.
EUH031 - Contact with acids liberates toxic gas.
H332 - Harmful if inhaled.

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Precautionary statements:

P273 - Avoid release to the environment.
P391 - Collect spillage.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
troclosene sodium	220-767-7	2893-78-9	[6]	Ox. Sol. 2 (H272) EUH031 Acute Tox. 4 (H302) STOT SE 3 (H335) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		50-75
adipic acid	204-673-3	124-04-9	01-2119457561-38	Eye Irrit. 2 (H319)		10-20
sodium toluenesulphonate	235-088-1	12068-03-0	[1]	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)		3-10
sodium N-lauroyl sarcosinate	205-281-5	137-16-6	01-2119527780-39	Acute Tox. 2 (H330) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		1-3

Specific concentration limits

troclosene sodium:

- STOT SE 3 (H335) >= 10%

sodium N-lauroyl sarcosinate:

- Skin Irrit. 2 (H315) >= 30%
- Eye Dam. 1 (H318) >= 30% > Eye Irrit. 2 (H319) >= 1%

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

ATE, if available, are listed in section 11.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[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****General Information:**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation:

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE, doctor or physician 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 respiratory irritation. 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

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5.1 Extinguishing media

Flood with water. Do not use carbon dioxide, extinguishing powder or 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**

Ensure adequate ventilation. Do not breathe dust or vapour. Wear eye/face protection.

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

Ensure adequate ventilation. 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

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:**

Keep away from heat.

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. Do not breathe dust. Do not breathe vapours. Use only outdoors or in a well-ventilated area. 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 dry place. Store in a closed container. Keep only in original packaging. Keep away from heat and direct sunlight. Keep at temperature not exceeding 40 °C.

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

Comah - Lower Tier requirements (tonnes): 100

Comah - Upper Tier requirements (tonnes): 200

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
troclosene sodium	-	-	-	1.15
adipic acid	-	-	-	7.5
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	-	-	-	10

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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)
troclosene sodium	No data available	-	No data available	2.3
adipic acid	No data available	-	No data available	-
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	No data available	-	No data available	-

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)
troclosene sodium	No data available	-	No data available	1.15
adipic acid	No data available	-	No data available	-
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	No data available	-	No data available	-

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
troclosene sodium	-	-	-	8.11
adipic acid	-	-	-	-
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	-	-	-	-

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
troclosene sodium	-	-	-	1.99
adipic acid	-	-	-	-
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	-	-	-	-

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)
troclosene sodium	0.00017	1.52	0.00017	0.59
adipic acid	0.126	0.013	0.46	59.1
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
troclosene sodium	7.56	-	0.756	-
adipic acid	0.484	0.048	0.023	-
sodium toluenesulphonate	No data available	No data available	No data available	No data available
sodium N-lauroyl sarcosinate	-	-	-	-

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

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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): 0.325

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

Method / remark

Physical state: Solid

Appearance: Tablets

Colour: Opaque , White

Odour: Chlorine

Odour threshold: Not applicable

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

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)
troclosene sodium	No data available		
adipic acid	No data available		
sodium toluenesulphonate	No data available		
sodium N-lauroyl sarcosinate	No data available		

Method / remark

Flammability (solid, gas): Not determined

Flammability (liquid): Not applicable.

Flash point (°C): > 60 °C

Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Lower and upper explosion limit/flammability limit (%): Not determined

closed cup

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

pH: Not applicable

Dilution pH: ≈ 5 (0.32 %)

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)
troclosene sodium	No data available		

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adipic acid	No data available		
sodium toluenesulphonate	No data available		
sodium N-lauroyl sarcosinate	No data available		

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

Vapour pressure: Not determined

Method / remark
See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
troclosene sodium	No data available		
adipic acid	No data available		
sodium toluenesulphonate	No data available		
sodium N-lauroyl sarcosinate	No data available		

Relative density: ≈ 1.00 (20 °C)

Relative vapour density: No data available.

Particle characteristics: Not determined.

Method / remark
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. After prolonged exposure above 40 °C the product could decompose and release excessive heat.

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.

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

After prolonged exposure above 40 °C the product could decompose and release excessive heat.

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

Mixture data: .

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

ATE - Inhalatory, mists (mg/l): >1

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	ATE
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		(mg/kg)			time (h)	(mg/kg)
troclosene sodium	LD ₅₀	1436	Mouse	Method not given		1436
adipic acid	LD ₅₀	5560	Rat			Not established
sodium toluenesulphonate		No data available				Not established
sodium N-lauroyl sarcosinate	LD ₅₀	> 5000	Rat	OECD 401 (EU B.1)		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
troclosene sodium	LD ₅₀	> 5000	Rat			Not established
adipic acid	LD ₅₀	> 7940	Rabbit	Method not given	24	Not established
sodium toluenesulphonate		No data available				Not established
sodium N-lauroyl sarcosinate		No data available				Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
troclosene sodium	LC ₅₀	> 0.27-1.17 (dust)	Rat	OECD 403 (EU B.2)	4
adipic acid	LC ₅₀	7700	Rat	Method not given	4
sodium toluenesulphonate		No data available			
sodium N-lauroyl sarcosinate	LC ₅₀	0.05 - 0.5 (dust)	Rat	OECD 403 (EU B.2)	4

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)
troclosene sodium	Not established	Not established	Not established	Not established
adipic acid	Not established	Not established	Not established	Not established
sodium toluenesulphonate	Not established	Not established	Not established	Not established
sodium N-lauroyl sarcosinate	Not established	-	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
troclosene sodium	Not irritant			
adipic acid	Mild irritant	Rabbit	Method not given	24 hour(s)
sodium toluenesulphonate	Irritant			
sodium N-lauroyl sarcosinate	Not irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
troclosene sodium	Irritant			
adipic acid	Irritant	Rabbit	Method not given	72 hour(s)
sodium toluenesulphonate	Irritant			
sodium N-lauroyl sarcosinate	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
troclosene sodium	Irritating to respiratory tract			
adipic acid	No data available			
sodium toluenesulphonate	No data available			
sodium N-lauroyl sarcosinate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
troclosene sodium	Not sensitising	Guinea pig	OECD 429 (EU B.42)	
adipic acid	Not sensitising	Guinea pig		
sodium toluenesulphonate	No data available			
sodium N-lauroyl sarcosinate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

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Ingredient(s)	Result	Species	Method	Exposure time
troclosene sodium	Not sensitising			
adipic acid	No data available			
sodium toluenesulphonate	No data available			
sodium N-lauroyl sarcosinate	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)
troclosene sodium	No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13)	No data available	
adipic acid	No data available		No data available	
sodium toluenesulphonate	No data available		No data available	
sodium N-lauroyl sarcosinate	No evidence for mutagenicity, negative test results	OECD 473	No data available	

Carcinogenicity

Ingredient(s)	Effect
troclosene sodium	No data available
adipic acid	No data available
sodium toluenesulphonate	No data available
sodium N-lauroyl sarcosinate	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
troclosene sodium			No data available				
adipic acid			No data available				
sodium toluenesulphonate			No data available				
sodium N-lauroyl sarcosinate			No data available				

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
troclosene sodium	NOAEL	115	Rat	Method not given	28	
adipic acid		No data available				
sodium toluenesulphonate		No data available				
sodium N-lauroyl sarcosinate	NOAEL	30	Rat	OECD 407 (EU B.7)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
troclosene sodium		No data available				
adipic acid		No data available				
sodium toluenesulphonate		No data available				
sodium N-lauroyl sarcosinate		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
troclosene sodium		No data available				
adipic acid		No data available				
sodium toluenesulphonate		No data available				
sodium N-lauroyl sarcosinate		No data available				

Chronic toxicity

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Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
troclosene sodium			No data available					
adipic acid			No data available					
sodium toluenesulphonate			No data available					
sodium N-lauroyl sarcosinate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
troclosene sodium	No data available
adipic acid	No data available
sodium toluenesulphonate	No data available
sodium N-lauroyl sarcosinate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
troclosene sodium	No data available
adipic acid	No data available
sodium toluenesulphonate	No data available
sodium N-lauroyl sarcosinate	No data available

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)
troclosene sodium	LC ₅₀	0.37-0.47	Fish		
adipic acid	LC ₅₀	> 1000	<i>Brachydanio rerio</i>	Method not given	96
sodium toluenesulphonate		No data available			
sodium N-lauroyl sarcosinate	LC ₅₀	107	<i>Brachydanio rerio</i>	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
troclosene sodium	EC ₅₀	0.21	<i>Daphnia magna</i> Straus	Method not given	48
adipic acid	EC ₅₀	46 (nominal)	<i>Daphnia magna</i> Straus	OECD 202, static	48
sodium toluenesulphonate		No data available			
sodium N-lauroyl sarcosinate	EC ₅₀	29.7	<i>Daphnia magna</i> Straus	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
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		(mg/l)			time (h)
troclosene sodium	LC ₅₀	< 0.5	<i>Chlorella pyrenoidosa</i>	Method not given	3
adipic acid	EC ₅₀	64.5 (nominal)	<i>Pseudokirchneriella subcapitata</i>	OECD 201, static	72
sodium toluenesulphonate		No data available			
sodium N-lauroyl sarcosinate	E _b C ₅₀	39	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
troclosene sodium		No data available			
adipic acid		No data available			
sodium toluenesulphonate		No data available			
sodium N-lauroyl sarcosinate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
troclosene sodium		51	<i>Bacteria</i>	OECD 209	3 hour(s)
adipic acid		No data available			
sodium toluenesulphonate		No data available			
sodium N-lauroyl sarcosinate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
troclosene sodium		No data available				
adipic acid		No data available				
sodium toluenesulphonate		No data available				
sodium N-lauroyl sarcosinate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
troclosene sodium		No data available				
adipic acid		No data available				
sodium toluenesulphonate		No data available				
sodium N-lauroyl sarcosinate		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
troclosene sodium		No data available				
adipic acid		No data available				
sodium toluenesulphonate		No data available				
sodium N-lauroyl sarcosinate		No data available				

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

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Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
troclosene sodium				OECD 301D	Not readily biodegradable.
adipic acid	Activated sludge, aerobe	Oxygen depletion	83% in 30 day(s)	OECD 301D	Readily biodegradable
sodium toluenesulphonate					Readily biodegradable
sodium N-lauroyl sarcosinate			90.9 % in 2 day(s)	OECD 301E	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
troclosene sodium	No data available			
adipic acid	No data available			
sodium toluenesulphonate	No data available			
sodium N-lauroyl sarcosinate	No data available		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
troclosene sodium	No data available				
adipic acid	No data available				
sodium toluenesulphonate	No data available				
sodium N-lauroyl sarcosinate	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
troclosene sodium	No data available				
adipic acid	No data available				
sodium toluenesulphonate	No data available				
sodium N-lauroyl sarcosinate	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

Titan Chlor Plus Tablets

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.
20 01 29* - detergents containing dangerous substances.

European Waste Catalogue:**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 or ID number: 3077

14.2 UN proper shipping name:

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

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:

Diversey does not recommend to transport this product by means of sea container.

Diversey does not recommend to transport this product by air.

14.7 Maritime transport in bulk according to IMO instruments: The product is not transported in bulk tankers.

Other relevant information:**ADR**

Classification code: M7

Tunnel restriction code: (E)

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

chlorine-based bleaching agents	>= 30 %
anionic surfactants	5 - 15 %
phosphates	< 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.

Titan Chlor Plus Tablets

Comah - classification: E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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

SDS code: MS1000293

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Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 16

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.

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
- 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
- H272 - May intensify fire; oxidiser.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H330 - Fatal if inhaled.
- 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.
- EUH031 - Contact with acids liberates toxic gas.

End of Safety Data Sheet