

Clax Magic Protein 70B2

Revision: 2015-04-23

Version: 01.0

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

1.1 Product identifier

Trade name: Clax Magic Protein 70B2

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

Identified uses:

For professional use only.

AISE-P113 - Prespotter/Stain remover. Manual process

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

1.3 Details of the supplier of the safety data sheet

Diversey local operating company

Contact details

Diversey local operating company

1.4 Emergency telephone number

Diversey local operating company

This International SDS is for information only. It does not meet all applicable regulatory requirements and does not replace the relevant statutory data sheet for your country.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Acute Tox. 4 (H302)

Eye Dam. 1 (H318)

Aquatic Chronic 3 (H412)

Classification in accordance with Directive 1999/45/EC and corresponding national legislation

Indication of danger

Xn - Harmful

Risk phrases:

R22 - Harmful if swallowed.

R41 - Risk of serious damage to eyes.

2.2 Label elements



Signal word: Danger.

Contains alkyl alcohol ethoxylate (Laureth-7), alkyl alcohol ethoxylate (C13-15 Pareth-7). EUH208: subtilisin (Subtilisin), 4-formylphenylboronic acid (4-Formylphenylboronic Acid), 1,2-benzisothiazol-3(2H)-one (Benzisothiazolinone)

Hazard statements:

H302 - Harmful if swallowed.

H318 - Causes serious eye damage.

EUH208 - May produce an allergic reaction.

H412 - Harmful to aquatic life with long lasting effects.

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Precautionary statements:

P280 - Wear eye or face protection.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

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

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (1999/45/EC)	Notes	Weight percent
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified	-		10-20
alkyl alcohol ethoxylate	Polymer*	68213-23-0	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xn;R22 Xi;R41		10-20
alkyl alcohol ethoxylate	Polymer*	64425-86-1	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400)	Xn;R22 Xi;R41 N;R50		10-20
alkyl alcohol alkoxyate	Polymer*	120313-48-6	[4]	Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	Xi;R38 N;R50		3-10
glycerol	200-289-5	56-81-5	01-2119471987-18	Not classified	-		3-10
subtilisin	232-752-2	9014-01-1	No data available	Acute Tox. 4 (H302) STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Aquatic Acute 1 (H400)	Xi;R37/38-41 Xn;R42		0.1-1
4-formylphenylboronic acid	438-670-5	87199-17-5	No data available	Skin Sens. 1 (H317)	Xi;R43		0.1-1

* Polymer.

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

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

[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.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

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.

Inhalation

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation or rash occurs: Get medical advice or attention.

Eye contact:

Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion:

Rinse mouth. Immediately drink 1 glass of water. 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:**

No known effects or symptoms in normal use.

Skin contact:

No known effects or symptoms in normal use.

Eye contact:

Causes severe or permanent damage.

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

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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**

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. Dilute with plenty of water. 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

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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:**

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 Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. Avoid contact with eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

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

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

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:

Ingredient(s)	EU - Long term value(s)	EU - Short term value(s)	UK - Long term value(s)	UK - Short term value(s)
propane-1,2-diol			150 ppm total particulates and vapour 474 mg/m ³ total particulates and vapour	450 ppm total particulate and vapour 1422 mg/m ³ total particulate and vapour
glycerol			10 mg/m ³ mist	30 mg/m ³ mist
subtilisin			0.00004 mg/m ³	0.00012 mg/m ³

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 oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propane-1,2-diol	-	-	-	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
glycerol	-	-	-	229
subtilisin	No data available	No data available	No data available	No data available

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4-formylphenylboronic acid	No data available	No data available	No data available	No data available
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DNEL 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)
propane-1,2-diol	No data available	-	No data available	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
glycerol	No data available	-	No data available	-
subtilisin	No data available	No data available	No data available	No data available
4-formylphenylboronic acid	No data available	No data available	No data available	No data available

DNEL 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)
propane-1,2-diol	No data available	-	No data available	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
glycerol	No data available	-	No data available	-
subtilisin	No data available	No data available	No data available	No data available
4-formylphenylboronic acid	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propane-1,2-diol	-	-	10	168
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
glycerol	-	-	-	56
subtilisin	No data available	No data available	No data available	No data available
4-formylphenylboronic acid	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propane-1,2-diol	-	-	10	50
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
glycerol	-	-	-	33
subtilisin	No data available	No data available	No data available	No data available
4-formylphenylboronic acid	No data available	No data available	No data available	No data available

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)
propane-1,2-diol	260	26	183	20000
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
glycerol	0.885	0.0885	8.85	1000
subtilisin	No data available	No data available	No data available	No data available
4-formylphenylboronic acid	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
propane-1,2-diol	572	57.2	50	-
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
alkyl alcohol alkoxyolate	No data available	No data available	No data available	No data available
glycerol	3.3	0.33	0.141	-
subtilisin	No data available	No data available	No data available	No data available
4-formylphenylboronic acid	No data available	No data available	No data available	No data available

8.2 Exposure controls

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

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Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: Use only in well ventilated areas.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).
Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.
Body protection: No special requirements under normal use conditions.
Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

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: Liquid
Colour: Clear, Colourless
Odour: Product specific
Odour threshold: Not applicable
pH: ≈ 8 (neat)
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
propane-1,2-diol	185-190	Method not given	1013
alkyl alcohol ethoxylate	No data available		
alkyl alcohol ethoxylate	No data available		
alkyl alcohol alkoxyate	> 250	Method not given	
glycerol	290	Method not given	1013
subtilisin	No data available		
4-formylphenylboronic acid	No data available		

Method / remark

Flash point (°C): Not applicable.
Sustained combustion: Not determined
Evaporation rate: Not determined
Flammability (solid, gas): Not determined
Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propane-1,2-diol	2.6	12.6
glycerol	2.7	19

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
propane-1,2-diol	18.6	Method not given	20
alkyl alcohol ethoxylate	No data available		
alkyl alcohol ethoxylate	No data available		
alkyl alcohol alkoxyate	< 10	Method not given	20
glycerol	< 1	Method not given	20
subtilisin	No data available		
4-formylphenylboronic acid	No data available		

Method / remark

Vapour density: Not determined
Relative density: 1.04 g/cm³ (20 °C)
Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
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propane-1,2-diol	Soluble	Method not given	
alkyl alcohol ethoxylate	No data available		
alkyl alcohol ethoxylate	No data available		
alkyl alcohol alkoxyate	Insoluble	Method not given	
glycerol	500	Method not given	20
subtilisin	No data available		
4-formylphenylboronic acid	No data available		

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

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: ≈ 130 mPa.s (20 °C)
Explosive properties: Not explosive.
Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive

Substance data, dissociation constant, if 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

None known under normal storage and use conditions.

10.5 Incompatible materials

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:

Relevant calculated ATE(s):

ATE - Oral (mg/kg): 1700

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)
propane-1,2-diol	LD ₅₀	> 10000	Rat	Method not given	
alkyl alcohol ethoxylate	LD ₅₀	> 300 - =< 2000		OECD 401 (EU B.1)	
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate	LD ₅₀	> 2000	Rat	Method not given	
glycerol	LD ₅₀	12600	Rat	Method not given	
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
propane-1,2-diol	LD ₅₀	> 2000	Rabbit	Method not given	

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alkyl alcohol ethoxylate		No data available		
alkyl alcohol ethoxylate		No data available		
alkyl alcohol alkoxyate		No data available		
glycerol	LD ₅₀	> 10000	Rabbit	Method not given
subtilisin		No data available		
4-formylphenylboronic acid		No data available		

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol		No data available			
alkyl alcohol ethoxylate		No data available			
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate		No data available			
glycerol		No data available			
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	Not irritant		OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxyate	Irritant	Rabbit	Draize test	
glycerol	Not irritant		OECD 404 (EU B.4)	
subtilisin	No data available			
4-formylphenylboronic acid	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
alkyl alcohol ethoxylate	Severe damage		OECD 405 (EU B.5)	
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxyate	Not corrosive or irritant	Rabbit	Method not given	
glycerol	Not corrosive or irritant		Method not given	
subtilisin	No data available			
4-formylphenylboronic acid	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxyate	No data available			
glycerol	No data available			
subtilisin	No data available			
4-formylphenylboronic acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl alcohol ethoxylate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxyate	No data available			
glycerol	Not sensitising	Human	Human repeated patch test	
subtilisin	No data available			

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4-formylphenylboronic acid	No data available		
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Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxyate	No data available			
glycerol	No data available			
subtilisin	No data available			
4-formylphenylboronic acid	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)
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
alkyl alcohol ethoxylate	No evidence for mutagenicity	Read across	No data available	
alkyl alcohol ethoxylate	No data available		No data available	
alkyl alcohol alkoxyate	No data available		No data available	
glycerol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
subtilisin	No data available		No data available	
4-formylphenylboronic acid	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
propane-1,2-diol	No evidence for carcinogenicity, negative test results
alkyl alcohol ethoxylate	No data available
alkyl alcohol ethoxylate	No data available
alkyl alcohol alkoxyate	No data available
glycerol	No evidence for carcinogenicity, negative test results
subtilisin	No data available
4-formylphenylboronic acid	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
propane-1,2-diol			No data available				No evidence for reproductive toxicity
alkyl alcohol ethoxylate			No data available				
alkyl alcohol ethoxylate			No data available				
alkyl alcohol alkoxyate			No data available				
glycerol			No data available				Not toxic for reproduction
subtilisin			No data available				
4-formylphenylboronic acid			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
propane-1,2-diol		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxyate		No data available				
glycerol		No data available				
subtilisin		No data available				
4-formylphenylboronic acid		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propane-1,2-diol		No data available				

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alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxyate		No data available				
glycerol		No data available				
subtilisin		No data available				
4-formylphenylboronic acid		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
propane-1,2-diol		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxyate		No data available				
glycerol		No data available				
subtilisin		No data available				
4-formylphenylboronic acid		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
propane-1,2-diol			No data available					
alkyl alcohol ethoxylate			No data available					
alkyl alcohol ethoxylate			No data available					
alkyl alcohol alkoxyate			No data available					
glycerol			No data available					
subtilisin			No data available					
4-formylphenylboronic acid			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
propane-1,2-diol	No data available
alkyl alcohol ethoxylate	No data available
alkyl alcohol ethoxylate	No data available
alkyl alcohol alkoxyate	No data available
glycerol	No data available
subtilisin	No data available
4-formylphenylboronic acid	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
propane-1,2-diol	No data available
alkyl alcohol ethoxylate	No data available
alkyl alcohol ethoxylate	No data available
alkyl alcohol alkoxyate	No data available
glycerol	No data available
subtilisin	No data available
4-formylphenylboronic acid	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information

12.1 Toxicity

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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)
propane-1,2-diol	LC ₅₀	> 1000	<i>Fish</i>	Method not given	24
alkyl alcohol ethoxylate	LC ₅₀	> 1 - =< 10	<i>Fish</i>	ISO 7346	
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate	LC ₅₀	1 - 10	<i>Leuciscus idus</i>	Method not given	96
glycerol	LC ₅₀	54000	<i>Oncorhynchus mykiss</i>	Method not given	96
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol	EC ₅₀	> 100	<i>Daphnia</i>	Method not given	48
alkyl alcohol ethoxylate	EC ₅₀	> 1 - =< 10	<i>Daphnia</i>	OECD 202	
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate	EC ₅₀	1	<i>Not specified</i>	Method not given	48
glycerol	EC ₅₀	> 10000	<i>Daphnia magna Straus</i>	Method not given	24
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol	EC ₅₀	24200	<i>Desmodesmus subspicatus</i>	OECD 201	72
alkyl alcohol ethoxylate	EC ₅₀	> 1 - =< 10	<i>Not specified</i>	OECD 201 DIN 38412, Part 9	
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate	EC ₅₀	0.1 - 1	<i>Not specified</i>	Method not given	72
glycerol		No data available			-
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
propane-1,2-diol		No data available			-
alkyl alcohol ethoxylate		No data available			
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate		No data available			-
glycerol		No data available			-
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
propane-1,2-diol	EC ₀	> 20000	<i>Pseudomonas putida</i>	Method not given	18 hour(s)
alkyl alcohol ethoxylate	EC ₀	> 100	<i>Bacteria</i>	DIN 38412 / Part 8	
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxyate		1000	<i>Activated sludge</i>	DIN EN ISO 8192-OECD 209-88/302/EEC	

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glycerol	EC ₅₀	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
subtilisin		No data available			
4-formylphenylboronic acid		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propane-1,2-diol		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxyate		No data available				
glycerol		No data available				
subtilisin		No data available				
4-formylphenylboronic acid		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propane-1,2-diol	NOEC	13020	<i>Ceriodaphnia dubia</i>	Method not given	7 day(s)	
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxyate	NOEC	0.25	<i>Daphnia magna</i>	Method not given	21 day(s)	
glycerol		No data available				
subtilisin		No data available				
4-formylphenylboronic acid		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
propane-1,2-diol		No data available			-	
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxyate		No data available			-	
glycerol		No data available			-	
subtilisin		No data available				
4-formylphenylboronic acid		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
propane-1,2-diol		No data available			-	
alkyl alcohol alkoxyate		No data available			-	
glycerol		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propane-1,2-diol		No data available			-	
alkyl alcohol alkoxyate		No data available			-	
glycerol		No data available			-	

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		available				
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Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
propane-1,2-diol		No data available			-	
alkyl alcohol alkoxylate		No data available			-	
glycerol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propane-1,2-diol		No data available			-	
alkyl alcohol alkoxylate		No data available			-	
glycerol		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propane-1,2-diol		No data available			-	
alkyl alcohol alkoxylate		No data available			-	
glycerol		No data 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
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
alkyl alcohol ethoxylate			> 70%		Readily biodegradable
alkyl alcohol ethoxylate					No data available
alkyl alcohol alkoxylate		CO ₂ production	> 60% in 28 day(s)	OECD 301B	Readily biodegradable
glycerol			60% in 28 day(s)	Method not given	Readily biodegradable
subtilisin					No data available
4-formylphenylboronic acid					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxylate	No data available		No bioaccumulation expected	
glycerol	-1.76	Method not given	No bioaccumulation expected	
subtilisin	No data available			
4-formylphenylboronic acid	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
propane-1,2-diol	No data available				
alkyl alcohol ethoxylate	No data available				

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alkyl alcohol ethoxylate	No data available				
alkyl alcohol alkoxyate	No data available				
glycerol	No data available				
subtilisin	No data available				
4-formylphenylboronic acid	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
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
alkyl alcohol ethoxylate	No data available				
alkyl alcohol ethoxylate	No data available				
alkyl alcohol alkoxyate	No data available				Potential for adsorption to soil
glycerol	No data available				Potential for mobility in soil, soluble in water
subtilisin	No data available				
4-formylphenylboronic acid	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 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.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**ADR, RID, ADN, IMO/IMDG, ICAO/IATA****14.1 UN number:** Non-dangerous goods**14.2 UN proper shipping name:** Non-dangerous goods**14.3 Transport hazard class(es):** Non-dangerous goods

Class: -

14.4 Packing group: Non-dangerous goods**14.5 Environmental hazards:** Non-dangerous goods**14.6 Special precautions for user:** Non-dangerous goods**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** The product is not transported in bulk tankers.**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII):** Not applicable.**Ingredients according to EC Detergents Regulation 648/2004**non-ionic surfactants
enzymes, Benzisothiazolinone

>=30%

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*

Clax Magic Protein 70B2**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 R, H and EUH phrases mentioned in section 3:

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H318 - Causes serious eye damage.
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- R22 - Harmful if swallowed.
- R37 - Irritating to respiratory system.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.
- R42 - May cause sensitisation by inhalation.
- R43 - May cause sensitisation by skin contact.
- R50 - Very toxic to aquatic organisms.

Abbreviations and acronyms:

- AISE - The International Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

End of Safety Data Sheet