According to Regulation (EC) No 1907/2006

Hagerty Silver Care

Revision: 2014-10-27 Version: 02.0

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

1.1 Product identifier

Trade name: Hagerty Silver Care

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

Identified uses:

AISE-C7 [3] - Surface cleaners (liquid, powder, gel neat, spray neat) for consumer use Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Hagerty SA

Contact details

Promenade-Noire 1, CH-2000 Neuchâtel, Switserland Tel +41 32 724 44 64 www.hagertycare.com

1.4 Emergency telephone number

24 hour medical emergency telephone number: + 41 44 251 51 51 Swiss Toxicological Information Centre, Zurich

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.

Eye Irrit. 2 (H319)

The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation

2.2 Label elements



Signal word: Warning

Contains EUH208: glutaral (Glutaral)

Hazard statements:

H319 - Causes serious eye irritation. EUH208 - May produce an allergic reaction.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

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

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
diatomaceous earth, uncalcinated (silica, amorphous)	231-545-4	61790-53-2	No data available		-		20-30
tetrapotassium pyrophosphate	230-785-7	7320-34-5	01-2119489369-18	Eye Irrit. 2 (H319)	Xi;R36		3-10
glycerol	200-289-5	56-81-5	01-2119471987-18		-		3-10
octadecane-1-thiol	220-744-1	2885-00-9	No data available	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	Xi;R36/37/38		3-10
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	287-809-4	85586-07-8	01-2119489463-28	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xn;R22 Xi;R38-41		1-3
glutaral	203-856-5	111-30-8	01-2119455549-26	Acute Tox. 3 (H301) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Resp. Sens. 1 (H334) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Met. Corr. 1 (H290)	T;R23/25 C;R34 Xn;R42/43 N;R50		0.01-0.1

* 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

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

Eye contact: Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.

Ingestion: 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. No known effects or symptoms in normal use. Skin contact:

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

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. Dilute with plenty of water.

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. Keep out of reach of children. Do not mix with other products. 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. 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)
diatomaceous earth, uncalcinated (silica, amorphous)			1.2 mg/m³ respirable dust	3.6 mg/m³ respirable dust
glycerol			10 mg/m³ mist	30 mg/m³ mist
glutaral			0.05 ppm 0.2 mg/m³	0.05 ppm 0.2 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
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	No data available	No data available	No data available	No data available
glycerol	No data available	No data available	No data available	229
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	No data available	No data available	24
glutaral	No data available	No data available	No data available	No data available

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)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	No data available	No data available	No data available	No data available
glycerol	No data available	No data available	No data available	No data available
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	No data available	No data available	4060
glutaral	No data available	No data available	No data available	No data available

DNEL dermal exposure - Consumer

NEE definial 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)
	enects	ellects (llig/kg bw)	Circus	enects (mg/kg bw)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	No data available	No data available	No data available	No data available

glycerol	No data available	No data available	No data available	No data available
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	No data available	No data available	2440
glutaral	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
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	No data available	No data available	No data available	44.08
glycerol	No data available	No data available	No data available	56
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	No data available	No data available	285
glutaral	0.5	No data available	0.25	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
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	No data available	No data available	No data available	10.87
glycerol	No data available	No data available	No data available	33
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	No data available	No data available	85
glutaral	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)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	0.05	0.005	0.5	50
glycerol	0.885	0.0885	8.85	1000
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	0.102	0.01	0.036	1084
glutaral	0.0025	0.00025	0.006	0.8

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available	No data available	No data available	No data available
tetrapotassium pyrophosphate	No data available	No data available	No data available	No data available
glycerol	3.3	0.33	0.141	No data available
octadecane-1-thiol	No data available	No data available	No data available	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	3.58	0.358	0.654	No data available
glutaral	0.527	0.0527	0.03	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.

Recommended safety measures for handling the <u>undiluted</u> product:

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

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Hand protection: Body protection:

Respiratory protection:

Eye / face protection: Safety glasses are not normally required. However, their use is recommended in those cases

where splashes may occur when handling the product. No special requirements under normal use conditions. No special requirements under normal use conditions. 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: Liquid Colour: from Red to Brown

Odour: Product specific
Odour threshold: Not applicable

pH: ≈ 10 (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)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available		
tetrapotassium pyrophosphate	No data available		
glycerol	290	Method not given	1013
octadecane-1-thiol	180	Method not given	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	> 100	Method not given	
glutaral	101.5	Method not given	987.1

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)
glycerol	2.7	19

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available		
tetrapotassium pyrophosphate	No data available		
glycerol	< 1	Method not given	20
octadecane-1-thiol	No data available		
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available		
glutaral	2000	Method not given	20.1

Method / remark

Vapour density: Not determined Relative density: 1.2 g/cm³ (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available		
tetrapotassium pyrophosphate	1850	Method not given	20
glycerol	500	Method not given	20
octadecane-1-thiol	Insoluble	Method not given	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Soluble	Method not given	
glutaral	Soluble	Method not given	20

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

Method / remark

Autoignition temperature: Not determined Decomposition temperature: Not determined

Viscosity: Not determined

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

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

Reacts with acids.

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): >2000

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)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate	LD 50	> 2000	Rat	Method not given	
glycerol	LD 50	12600	Rat	Method not given	
octadecane-1-thiol	LD 50	> 2000	Rat	Method not given	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	LD 50	> 1800	Rat	Method not given	
glutaral	LD 50	158	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate	LD 50	> 2000	Rabbit	Method not given	
glycerol	LD 50	> 10000	Rabbit	Method not given	
octadecane-1-thiol		No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	LD 50	> 2000	Rabbit	Method not given	
glutaral	LD 50	> 2000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate	LC 50	> 1.1	Rat	Method not given	4
glycerol		No data available			
octadecane-1-thiol		No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data available			
glutaral	LC 50	0.48 (mist)	Rat	OECD 403 (EU B.2)	4

Irritation and corrosivity

Skin irritation and corrosivity

	Ingredient(s)	Result	Species	Method	Exposure time
Г	diatomaceous earth, uncalcinated (silica, amorphous)	No data available			
Γ	tetrapotassium pyrophosphate	Not irritant		Method not given	

glycerol	Not irritant		OECD 404 (EU B.4)	
octadecane-1-thiol	Irritant		Method not given	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
glutaral	Corrosive	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
diatomaceous earth, uncalcinated (silica, amorphous)	No data available			
tetrapotassium pyrophosphate	Irritant		Method not given	
glycerol	Not corrosive or irritant		Method not given	
octadecane-1-thiol	Irritant		Method not given	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
glutaral	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
diatomaceous earth, uncalcinated (silica, amorphous)	No data available			
tetrapotassium pyrophosphate	No data available			
glycerol	No data available			
octadecane-1-thiol	No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available			
glutaral	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available			
tetrapotassium pyrophosphate	Not sensitising		Method not given	
glycerol	Not sensitising	Human	Human repeated patch test	
octadecane-1-thiol	No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
glutaral	Sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
diatomaceous earth, uncalcinated (silica, amorphous)	No data available			
tetrapotassium pyrophosphate	No data available			
glycerol	No data available			
octadecane-1-thiol	No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available			
glutaral	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)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available		No data available	
tetrapotassium pyrophosphate	No data available		No data available	
glycerol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
octadecane-1-thiol	No data available		No data available	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476 (Mouse lymphoma)		OECD 474 (EU B.12)
glutaral	Mutagenic		No evidence for mutagenicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
diatomaceous earth, uncalcinated (silica, amorphous)	No data available
tetrapotassium pyrophosphate	No data available
glycerol	No evidence for carcinogenicity, negative test results
octadecane-1-thiol	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No evidence for carcinogenicity, negative test results
glutaral	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
diatomaceous earth, uncalcinated (silica, amorphous)			No data available				
tetrapotassium pyrophosphate			No data available				
glycerol			No data available				Not toxic for reproduction
octadecane-1-thiol			No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOEL	Teratogenic effects Developmental toxicity	250	Rat	OECD 414 (EU B.31), oral		
glutaral			No data available				No evidence for developmental toxicity 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
diatomaceous earth, uncalcinated (silica, amorphous)		No data available				
tetrapotassium pyrophosphate		No data available				
glycerol		No data available				
octadecane-1-thiol		No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOAEL	488		OECD 408 (EU B.26)	90	
glutaral		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	
diatomaceous earth, uncalcinated (silica, amorphous)		No data available				
tetrapotassium pyrophosphate		No data available				
glycerol		No data available				
octadecane-1-thiol		No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data available				
glutaral		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
diatomaceous earth, uncalcinated (silica, amorphous)		No data available				
tetrapotassium pyrophosphate		No data available				
glycerol		No data available				
octadecane-1-thiol		No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data available				
glutaral		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
diatomaceous earth, uncalcinated (silica, amorphous)			No data available					
tetrapotassium pyrophosphate			No data available					
glycerol			No data available					
octadecane-1-thiol			No data available					

sulphuric acid, mono-C12-14-alkyl esters, sodium salts	1	No data available			
glutaral	1	No data available			

STOT-single exposure

Ingredient(s)	Affected organ(s)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available
tetrapotassium pyrophosphate	No data available
glycerol	No data available
octadecane-1-thiol	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available
glutaral	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
diatomaceous earth, uncalcinated (silica, amorphous)	No data available
tetrapotassium pyrophosphate	No data available
glycerol	No data available
octadecane-1-thiol	No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available
glutaral	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

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)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate	LC 50	> 100	Oncorhynchus mykiss	OECD 203	96
glycerol	LC 50	54000	Oncorhynchus mykiss	Method not given	96
octadecane-1-thiol		No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	LC 50	3.6	Fish	OECD 203	96
glutaral	LC 50	5.4	Pimephales promelas	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate	EC 50	> 100	Daphnia magna Straus	OECD 202	48
glycerol	EC 50	> 10000	Daphnia magna Straus	Method not given	24
octadecane-1-thiol		No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	EC 50	4.7	Daphnia	84/449/EEC, C2	48
glutaral	LC 50	0.345	Daphnia magna Straus	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate		No data available			

glycerol		No data			
		available			
octadecane-1-thiol		No data			
		available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Er C 50	> 20	Not specified	88/302/EEC, Part C,	72
				static	
glutaral	EC 50	0.6	Desmodesmus	OECD 201, static	72
-			subspicatus		

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate		No data available			
glycerol		No data available			
octadecane-1-thiol		No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data available			
glutaral		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
diatomaceous earth, uncalcinated (silica, amorphous)		No data available			
tetrapotassium pyrophosphate		No data available			
glycerol	EC 50	> 10000	Pseudomonas putida	Method not given	16 hour(s)
octadecane-1-thiol		No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	EC 10	1084	Bacteria	DIN 38412 / Part 8	16 hour(s)
glutaral	EC 20	15	Activated sludge	OECD 209	30 minute(s)

Aquatic long-term toxicity Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
diatomaceous earth, uncalcinated (silica, amorphous)		No data available				
tetrapotassium pyrophosphate		No data available				
glycerol		No data available				
octadecane-1-thiol		No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOEC	0.11 - 0.35	Not specified	OECD 210	34 day(s)	
glutaral		No data available				

Aquatic long-term toxicity - crustacea									
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed			
diatomaceous earth, uncalcinated (silica, amorphous)		No data available							
tetrapotassium pyrophosphate		No data available							
glycerol		No data available							
octadecane-1-thiol		No data available							
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOEC	0.508	Daphnia sp.	Method not given	7 day(s)				
glutaral		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
diatomaceous earth, uncalcinated (silica, amorphous)		No data available				
tetrapotassium pyrophosphate		No data available				

glycerol	No data		
	available		
octadecane-1-thiol	No data		
	available		
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data		
	available		
glutaral	No data		
	available		

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

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
diatomaceous earth, uncalcinated (silica, amorphous)					No data available
tetrapotassium pyrophosphate					Not applicable (inorganic substance)
glycerol			60% in 28 day(s)	Method not given	Readily biodegradable
octadecane-1-thiol					No data available
sulphuric acid, mono-C12-14-alkyl esters, sodium salts			75.7 % in 28 day(s)	OECD 301B	Readily biodegradable
glutaral	Activated sludge, aerobe	DOC reduction	90 - 100 % in 28 day(s)	OECD 301A	Readily biodegradable

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
diatomaceous earth, uncalcinated (silica, amorphous)	No data available			
tetrapotassium pyrophosphate	-2	Method not given	No bioaccumulation expected	
glycerol	-1.76	Method not given	No bioaccumulation expected	
octadecane-1-thiol	No data available			
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	< -2.42	Method not given	No bioaccumulation expected	
glutaral	-0.36	(EC) 440/2008, A.8	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
diatomaceous earth, uncalcinated (silica, amorphous)	No data available				
tetrapotassium pyrophosphate	No data available				
glycerol	No data available				
octadecane-1-thiol	No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available				
glutaral	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
diatomaceous earth, uncalcinated (silica, amorphous)	No data available				
tetrapotassium pyrophosphate	No data available				
glycerol	No data available				Potential for mobility in soil, soluble in water
octadecane-1-thiol	No data available				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available				
glutaral	0.76		Method not given		Potential for adsorption to soil

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 goods14.5 Environmental hazards: Non-dangerous goods14.6 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

phosphates 5 - 15% anionic surfactants 5 - 5%

Glutaral

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

MSDS code: MS1001298 **Version:** 02.0 **Revision:** 2014-10-27

Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 3, 13

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:

- H290 May be corrosive to metals.
 H301 Toxic if swallowed.
 H302 Harmful if swallowed.

- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- 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.
- R23 Toxic by inhalation.R25 Toxic if swallowed.
- R34 Causes burns. R36 Irritating to eyes.
- 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