

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Enhance Spot & Stain Remover

Revision: 2017-09-09 Version: 04.1

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

1.1 Product identifier

Trade name: Enhance Spot & Stain Remover

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

Identified uses:

For professional use only.

AISE-P409 - Carpet cleaner. Manual process

AISE-P411 - Carpet cleaner. Spray and brush manual process

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

1.3 Details of the supplier of the safety data sheet

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

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not classified as hazardous

2.2 Label elements

Hazard statements:

EUH210 - Safety data sheet available on request.

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	Notes	Weight percent
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)		1-3

^{*} Polymer.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice

or attention.

Eye contact: Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical

attention.

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.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.

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

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. 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. Do not mix with other products unless adviced by Diversey.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original 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:

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
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	-	-	-	24

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	-	No data available	4060

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)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available	-	No data available	2440

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	-	-	-	285

DNEL inhalatory exposure - Consumer (mg/m3)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	-	-	-	85

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)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	0.102	0.01	0.036	1084

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	3.58	0.358	0.654	=

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 <u>undiluted</u> product:

Appropriate engineering controls: Provide a good standard of general ventilation.

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

Personal protective equipment

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 (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: Milky, White Odour: Slightly perfumed Odour threshold: Not applicable

pH: 7.5 (neat) 7 ± 0.5

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

Not relevant to classification of this product

Substance data, boiling point

Ingredient(s)	Value	Method	Atmospheric pressure
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	(°C)		(hPa)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	> 100	Method not given	

Method / remark

Flash point (°C): Not applicable.

Sustained combustion: Not applicable.

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

Evaporation rate: Not determined Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available		

Method / remark

Vapour density: Not determined Relative density: ≈ 1.00 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Soluble	Method not given	

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

Method / remark

Autoignition temperature: Not determined Decomposition temperature: Not applicable.

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

Not relevant to classification of this product

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): >2000

Skin irritation and corrosivity

Result: Not corrosive or irritant Method: Weight of evidence

Eye irritation and corrosivity

Result: Not corrosive or irritant Method: Weight of evidence

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)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	LD 50	> 1800	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	LD 50	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
	No data			
	Endpoint	(mg/l)	(mg/l) No data	(mg/l) No data

Irritation and corrosivity

Oran intation and correctivity				
Ingredient(s)	Result	Species	Method	Exposure time
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available			

Sensitisation

Sensitisation by skin contact

	Ingredient(s)	Result	Species	Method	Exposure time (h)
sulphuric acid	, mono-C12-14-alkyl esters, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
				GPMT	

Sensitisation by inhalation

Ī	Ingredient(s)	Result	Species	Method	Exposure time
	sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

matagomoty				$\overline{}$
Ingredient(s)	Result (in-vitro)	Method	Result (in-vivo)	Method
		(in-vitro)		(in-vivo)
sulphuric acid, mono-C12-14-alkyl esters,	No evidence for mutagenicity, negative	OECD 471 (EU	No evidence for mutagenicity, negative	OECD 474 (EU
sodium salts	test results	B.12/13) OECD	test results	B.12)
		476 (Mouse		
		lymphoma)		

Carcinogenicity

Carcinogeniony	
Ingredient(s)	Effect
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	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
sulphuric acid,	NOEL	Teratogenic effects	250	Rat	OECD 414		
mono-C12-14-alkyl		Developmental toxicity			(EU B.31),		
esters, sodium salts					oral		

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
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOAEL	488		OECD 408 (EU B.26)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		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
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		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
sulphuric acid,			No data					
mono-C12-14-alkyl			available					
esters, sodium salts								l l

STOT-single exposure

Ì	Ingredient(s)	Affected organ(s)
Ī	sulphuric acid, mono-C12-14-alkyl esters, sodium salts	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	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)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	LC 50	3.6	Fish	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	EC 50	4.7	Daphnia	84/449/EEC, C2	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	Er C 50	> 20	Not specified	88/302/EEC, Part C, static	72

Aquatic short-term toxicity - marine species

	Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
SI	llphuric acid, mono-C12-14-alkyl esters, sodium salts		No data available			-

Impact on sewage plants - toxicity to bacteria

impact on corrage plants textory to bacteria					
Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
		(ilig/i)			tillic
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	EC 10	1084	Bacteria	DIN 38412 / Part 8	16 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOEC	0.11 - 0.35	Not specified	OECD 210	34 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	NOEC	0.508	Daphnia sp.	Method not	7 day(s)	
				given		

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

Terrestrial toxicity

errestrial toxicity - soil invertebrates, including earthworms, in available.								
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed		
		(mg/kg dw			time (days)			
		soil)						
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data			-			
		available						

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - plants, if available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw			time (days)	
		soil)				
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data			-	
		available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

refrestrial toxicity - beneficial insects, if available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw soil)			time (days)	
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data			_	
Sulphune acid, mono-c 12-14-aikyr esters, socium saits					_	
		available				

l errestrial toxicity - soil dacteria, if available:							
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed	
• • • • • • • • • • • • • • • • • • • •		(mg/kg dw	·		time (days)		
		soil)			, , ,		
sulphuric acid, mono-C12-14-alkyl esters, sodium salts		No data			-		
	ĺ	available	l				

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:

BiodegradationReady biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sulphuric acid, mono-C12-14-alkyl esters, sodium salts			75.7 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

-antition coefficient in-octanol/water (log Now)									
Ingredient(s)	Value	Method	Evaluation	Remark					
sulphuric acid, mono-C12-14-alkyl	< -2.42	Method not given	No bioaccumulation expected						
esters, sodium salts									

Bioconcentration factor (BCF)

Sideoffice Intraction (action (about)									
Ingredient(s)	Value	Species	Method	Evaluation	Remark				
sulphuric acid,	No data available								
mono-C12-14-alkyl									
esters, sodium salts									

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
sulphuric acid, mono-C12-14-alkyl esters, sodium salts	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 30 - detergents other than those mentioned in 20 01 29.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Water, if necessary with cleaning agent. Suitable cleaning agents:

SECTION 14: Transport information

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

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 and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No 1272/2008 CLP
 Regulation (EC) No. 1907/2006 REACH
 Regulation (EC) No. 648/2004 Detergents regulation

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

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants

perfumes, Hexyl Cinnamal, Butylphenyl Methylpropional

< 5%

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.

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: MSDS7197 Version: 04.1 Revision: 2017-09-09

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 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.

Full text of the H and EUH phrases mentioned in section 3: • H302 - Harmful if swallowed. • H315 - Causes skin irritation.

- H318 Causes serious eye damage.
- H412 Harmful to aquatic life with long lasting effects.

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