

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Strip K9

Version 03

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

1.1 Product identifier

Revision: 2012-10-08

Trade name: Suma Strip K9

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

Identified uses: For professional and industrial use only AISE-P202 - Dishwash product. Automatic process AISE-P801 - Food process cleaner. Cleaning In place (CIP) process Uses advised against Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Diversey Ltd

Contact details

Weston Favell Centre, Northampton NN3 8PD, United Kingdom Tel: 01604 405311, Fax: 01604 406809 Regulatory Email: MSDSinfoUK@sealedair.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

The product has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

Indication of danger

C - Corrosive

Risk phrases:

R35 - Causes severe burns.

2.2 Label elements



C - Corrosive

Contains sodium hydroxide

Risk phrases: R35 - Causes severe burns.

Safety phrases:

S22 - Do not breathe dust.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28a - After contact with skin, wash immediately with plenty of water.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

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 (EC) 1272/2008	Notes	Weight percent
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	C; R35	Skin Corr. 1A (H314)		>= 75
alkyl alcohol ethoxylate	Polymer*	146340-16-1	[4]	Xi,N; R38-50	Aquatic Acute 1 (H400) Skin Irrit. 2 (H315)		1-3

* 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 Inhalation Skin contact	If unconscious place in recovery position and seek medical advice. Remove from source of exposure. Get medical attention immediately. Immediately wash off with plenty of water. Take off all contaminated clothing immediately. Get medical attention.
Eye contact	Wash off immediately with plenty of water. Get medical attention immediately.
Ingestion	Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention immediately.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.
4.2 Most important symptoms and effe	ects, both acute and delayed
Inhalation	Severe irritant, may cause respiratory tract irritation.
Skin contact	Causes severe burns.
Eye contact	Causes severe or permanent damage.
Ingestion	Causes severe burns. Ingestion will lead to a strong caustic effect on mouth and throat and to the

Sensitisation

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.

danger of perforation of oesophagus and stomach.

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.

No known effects.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Collect mechanically. Ensure adequate ventilation.

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 Advice on safe handling

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Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. Avoid dust formation. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

Prevention of fire and explosion

No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms / facilities:

In accordance with local and national regulations.

Combined storage in storage rooms / facilities:

In accordance with local and national regulations. For incompatible materials see subsection 10.5.

Basic storage conditions

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

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)	UK - Long term value(s)	UK - Short term value(s)
sodium hydroxide		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
sodium hydroxide	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

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)
sodium hydroxide	2 %	No data available	No data available	No data available
alkyl alcohol ethoxylate	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)
sodium hydroxide	2 %	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

DNEL inhalatory	exposure - Worker (mg/m ³)
	la sus d'aut(a)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium hydroxide	No data available	No data available	1	No data available
alkyl alcohol ethoxylate	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
sodium hydroxide	No data available	No data available	1	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium hydroxide	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

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium hydroxide	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

8.2 Exposure controls General health and safety measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Wash hands before breaks and at the end of workday. Do not breathe dust. Avoid contact with skin and eyes.

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 undiluted product:

Appropriate engineering controls:	If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.
Appropriate organisational controls:	Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment Eye / face protection: Hand protection:	Safety glasses or goggles (EN 166). Chemical-resistant protective gloves (EN 374) Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature
	Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: >= 480 min Material thickness: >= 0.7 mm
	Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: >= 30 min Material thickness: >= 0.4 mm
	In consultation with the supplier of protective gloves a different type providing similar protection may be chosen
Body protection:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.
Respiratory protection:	If exposure to dust cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen
Environmental exposure controls:	Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 4

Appropriate engineering controls:	The product is intended to be used in closed systems. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.
Appropriate organisational controls: Personal protective equipment . Eye / face protection:	Avoid direct contact and/or splashes where possible. Train personnel. Safety glasses or goggles (EN 166).

Hand protection:	Chemical-resistant protective gloves (EN 374) Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: >= 480 min Material thickness: >= 0.7 mm Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: >= 30 min Material thickness: >= 0.4 mm
	In consultation with the supplier of protective gloves a different type providing similar protection may be chosen
Body protection:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.
Respiratory protection:	If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required
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

Physical State:	Solid
Colour	White
Odour	Product specific
Dilution pH:	> 12 (1%)
Boiling point/range (°C):	Not determined
Flash point (°C):	Not applicable.
Flammability	Not flammable.
Specific gravity:	0.96 g/cm ³ (20°C)
Solubility in / Miscibility with	Water: Soluble
Explosive properties	Not explosive.
Oxidising properties:	Not oxidising.

9.2 Other information

No other relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

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 Mixtures

No test data is available on the mixture

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

Acute toxicity

Acute oral toxicity						
	Ingredient(s)	Endpoint	Value	Species	Method	Exposure
			(mg/kg)			time (h)

sodium hydroxide	LD ₅₀	1350	Rat	Method not given	
alkyl alcohol ethoxylate	50	No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hydroxide	LD 50	1350	Rabbit	Method not given	
alkyl alcohol ethoxylate		No data available			

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	LC	4800	Mouse	Method not given	1
alkyl alcohol ethoxylate	50	No data available			

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
alkyl alcohol ethoxylate	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
alkyl alcohol ethoxylate	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
alkyl alcohol ethoxylate	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hydroxide	Not sensitising		Human repeated patch	
			test	
alkyl alcohol ethoxylate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
alkyl alcohol ethoxylate	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 (davs)	Specific effects and organs affected
a a divers hundraviala	-				anie (days)	ancorea
sodium hydroxide		No data				
		available				
alkyl alcohol ethoxylate		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
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium hydroxide		No data				
		available				
alkyl alcohol ethoxylate		No data				
		available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium hydroxide			No data available					
alkyl alcohol ethoxylate			No data available					

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available

Carcinogenicity	
Ingredient(s)	Effect
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
alkyl alcohol ethoxylate	No data available

Mutagenicity

initiagenicity				
Ingredient(s)	Result (in-vitro)	Method	Result (in-vivo)	Method
• • • •		(in-vitro)		(in-vivo)
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test	No evidence for mutagenicity, negative test results	OECD 474 (EU
		on rat		B.12) OECD
		hepatocytes		475 (EU B.11)
		OECD 473		
alkyl alcohol ethoxylate	No data available		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
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
alkyl alcohol ethoxylate			No data available				

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

Mixtures No test data is available on the mixture.

Substance data, where relevant and available, are listed below

Aquatic short-term toxicity Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	LC ₅₀	35	Various species	Method not given	96
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC 50	40.4	Ceriodaphnia sp.	Method not given	48
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC ₅₀	22	Photobacteriu m phosphoreum	Method not given	0.25
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - marine species					
Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/l)			time (days)

sodium hydroxide	No data available		
alkyl alcohol ethoxylate	No data available		

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium hydroxide		No data available			
alkyl alcohol ethoxylate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
sodium hydroxide		No data				
		available				
alkyl alcohol ethoxylate		No data				
		available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if 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:								
Ingredient(s)	Half-life time	Method	Evaluation	Remark				
sodium hydroxide 13 second(s)		Method not given	Rapidly photodegradable					

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
sodium hydroxide					Not applicable (inorganic substance)
alkyl alcohol ethoxylate					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

Ingredient(s)	Ingredient(s) Value		Value Method Evaluation		Evaluation	Remark
sodium hydroxide	No data available		Not relevant, does not bioaccumulate			
alkyl alcohol ethoxylate	No data available					

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hydroxide	No data available				
alkyl alcohol ethoxylate	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium hydroxide	No data available				Mobile in soil
alkyl alcohol ethoxylate	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 productsDispose of in compliance with all Federal, state, provincial, and local laws and regulations.European Waste Catalogue:20 01 15* - alkalines.

Empty packaging Recommendation:

Dispose of observing national or local regulations.

SECTION 14: Transport information



ADR, RID, ADN, IMO/IMDG, ICAO/IATA 14.1 UN number: 1823 14.2 UN proper shipping name: Sodium hydroxide, solid, mixture 14.3 Transport hazard class(es):

Class:8

Label(s):8

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous:No

Marine pollutant No

14.6 Special precautions for user: None known.

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.

Other relevant information:

ADR

Classification Code C6

Hazard identification number: 80

IMO/IMDG

EmS F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

Ingredients according to EC Detergents Regulation 648/2004 non-ionic surfactants, phosphates

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: MSDS3957

Version 03

Revision: 2012-10-08

Reason for revision:

Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

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

- R35 Causes severe burns.
- R50 Very toxic to aquatic organisms.
- R38 Irritating to skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
 H400 Very toxic to aquatic life.

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

End of Safety Data Sheet