Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Jade L8

Revision: 2013-01-04 *Version: 04*

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

1.1 Product identifier
Trade name: Suma Jade L8

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
Non-industrial 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 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 Directive 1999/45/EC and corresponding national legislation.

Indication of danger
Xi - Irritant

Risk phrases:
R41 - Risk of serious damage to eyes.

2.2 Label elements

Xi - Irritant

Risk phrases:
R41 - Risk of serious damage to eyes.

Safety phrases:
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39 - Wear 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
tetrasodium ethylene diamine tetraacetate	200-573-9	64-02-8	01-2119486762-27	Xn; R20/22-41	Eye Dam. 1 (H318) Acute Tox. 4 (H302) Acute Tox. 4 (H332)		20-30
sodium silicate (1.6-2.4 ratio)	237-623-4	13870-28-5	[1]	Xi; R37/38-41	Eye Dam. 1 (H318) STOT SE 3 (H335) Skin Irrit. 2 (H315)		10-20

* 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 Remove from source of exposure. Get medical attention.

Skin contact: Not required under normal use. If irritation develops get medical attention. Rinse with plenty of water.

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.

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: Causes irritation.

Skin contact: Unlikely to be irritant in normal use.

Eye contact: Causes severe irritation.

Ingestion: Causes irritation.

Sensitisation: No known effects.

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

Wear eye/face protection.

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

Advice on safe handling:

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. 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:

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
tetrasodium ethylene diamine tetraacetate	No data available	No data available	No data available	25
sodium silicate (1.6-2.4 ratio)	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)
tetrasodium ethylene diamine tetraacetate	No data available	No data available	No data available	No data available
sodium silicate (1.6-2.4 ratio)	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)
tetrasodium ethylene diamine tetraacetate	No data available	No data available	No data available	No data available
sodium silicate (1.6-2.4 ratio)	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
tetrasodium ethylene diamine tetraacetate	2.5	2.5	2.5	2.5
sodium silicate (1.6-2.4 ratio)	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
tetrasodium ethylene diamine tetraacetate	1.5	1.5	1.5	1.5
sodium silicate (1.6-2.4 ratio)	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)
tetrasodium ethylene diamine tetraacetate	2.2	0.22	1.2	43
sodium silicate (1.6-2.4 ratio)	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)
tetrasodium ethylene diamine tetraacetate	No data available	No data available	0.72	No data available
sodium silicate (1.6-2.4 ratio)	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. Wash hands before breaks and at the end of workday. Avoid contact with 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.
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:	No special requirements under normal use conditions.
Body protection:	No special requirements under normal use conditions.
Respiratory protection:	No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 0.5

Appropriate engineering controls:	The product is intended to be used in closed systems.
Appropriate organisational controls:	No special requirements under normal use conditions.

Personal protective equipment .

Eye / face protection:	No special requirements under normal use conditions.
Hand protection:	No special requirements under normal use conditions.
Body protection:	No special requirements under normal use conditions.
Respiratory protection:	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
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 Pale Yellow
Odour: Product specific
Odour threshold: Not applicable.
pH:> 12 (neat)

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

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

Flash point (°C): Not applicable.

Sustained combustion: Not determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined

Vapour density: Not determined

Relative density: 1.29 g/cm³ (20°C)

Solubility in / Miscibility with Water: Fully miscible

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
(according to IMDG/ADR regulation): Not determined

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 (mg/kg)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	LD_{50}	>= 1780	Rat	Non guideline test	
sodium silicate (1.6-2.4 ratio)		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate		No data available			
sodium silicate (1.6-2.4 ratio)		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	LC_{50}	>= 1	Rat	OECD 403 (EU B.2)	6
sodium silicate (1.6-2.4 ratio)		No data available			

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Not irritant		Method not given	
sodium silicate (1.6-2.4 ratio)	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	

sodium silicate (1.6-2.4 ratio)	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
sodium silicate (1.6-2.4 ratio)	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sodium silicate (1.6-2.4 ratio)	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
sodium silicate (1.6-2.4 ratio)	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
tetrasodium ethylene diamine tetraacetate		No data available				
sodium silicate (1.6-2.4 ratio)		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
tetrasodium ethylene diamine tetraacetate		No data available				
sodium silicate (1.6-2.4 ratio)		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
tetrasodium ethylene diamine tetraacetate		No data available				
sodium silicate (1.6-2.4 ratio)		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
tetrasodium ethylene diamine tetraacetate			No data available					
sodium silicate (1.6-2.4 ratio)			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
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence
sodium silicate (1.6-2.4 ratio)	No data available

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
tetrasodium ethylene diamine tetraacetate	No evidence for mutagenicity, negative test results		No evidence of genotoxicity, negative test results	
sodium silicate (1.6-2.4 ratio)	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
tetrasodium ethylene diamine tetraacetate			No data available				No evidence for reproductive toxicity
sodium silicate (1.6-2.4 ratio)			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)
tetrasodium ethylene diamine tetraacetate	LC_{50}	> 100	Lepomis macrochirus	OPP 72-1, static (EPA)	96
sodium silicate (1.6-2.4 ratio)		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC_{50}	> 100	Daphnia magna Straus	DIN 38412, Part 11	48
sodium silicate (1.6-2.4 ratio)		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC_{50}	> 100	Scenedesmus obliquus		72
sodium silicate (1.6-2.4 ratio)		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
tetrasodium ethylene diamine tetraacetate		No data available			
sodium silicate (1.6-2.4 ratio)		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	EC_{20}	> 500	Activated sludge	OECD 209	0.5 hour(s)
sodium silicate (1.6-2.4 ratio)		No data available			

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

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	>= 36.9	Brachydanio rerio	OECD 210	35 day(s)	
sodium silicate (1.6-2.4 ratio)		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	25	Daphnia magna	OECD 211	21 day(s)	
sodium silicate (1.6-2.4 ratio)		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:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
tetrasodium ethylene diamine tetraacetate	LD_{50}	156	Eisenia fetida		14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	0.25 - 1.25			21	

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
tetrasodium ethylene diamine tetraacetate					Readily biodegradable
sodium silicate (1.6-2.4 ratio)					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential
Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	No data available			
sodium silicate (1.6-2.4 ratio)	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	1.8	Lepomis macrochirus		Low potential for bioaccumulation	
sodium silicate (1.6-2.4 ratio)	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
tetrasodium ethylene diamine tetraacetate	No data available				
sodium silicate (1.6-2.4 ratio)	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: Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.

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

Ingredients according to EC Detergents Regulation 648/2004

EDTA and salts thereof	15 - 30%
phosphonates, polycarboxylates	< 5%

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: MSDS3479 **Version:** 04 **Revision:** 2013-01-04

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
- R41 - Risk of serious damage to eyes.
- R20/22 - Harmful by inhalation and if swallowed.
- R37/38 - Irritating to respiratory system and skin.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.

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