

Trade name: KARMA**Product no.:** AS 203 C1269 UK**Current version :** 3.0.0, issued: 03.09.2019**Replaced version:** 2.0.1, issued: 20.06.2019**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

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

Plant protection product

Fungicide

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**

Certis Europe (GB)

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Granta Park - Great Abington

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United Kingdom

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e-mail info@certiseurope.co.uk - www.certiseurope.co.uk

Advice on Safety Data Sheet

certis@certiseurope.co.uk

1.4 Emergency telephone number

Carechem 24 GB +44 870 190 6777

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification information**

Classification and labelling are based on toxicological studies performed on the product (mixture).

Classification and labelling with respect to water pollution risks are based on ecotoxicological studies performed on the product (mixture).

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

This product does not meet the classification criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

-

Signal word

-

Hazard statement(s)

-

Hazard statements (EU)

EUH401

To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statement(s)

P260

Do not breathe dust.

P262

Do not get in eyes, on skin, or on clothing.

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P501

Wear protective gloves/protective clothing.
Dispose of contents/ container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste.

Labelling information

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

2.3 Other hazardsPBT assessment
No data available.vPvB assessment
No data available.**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Hazardous ingredients**

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	potassium-hydrogencarbonate		
	298-14-6 206-059-0 - -	-	>= 70.00 - < 90.00 %-b.w.
2	sodium-dodecyl-sulfate		
	151-21-3 205-788-1 - 01-2119489461-32	Flam. Sol. 2; H228 Acute Tox. 4; H332 Acute Tox. 4; H302 STOT SE 3; H335 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	< 15.00 %-b.w.
3	Docusate-sodium		
	577-11-7 209-406-4 - 01-2119491296-29	Eye Dam. 1; H318 Skin Irrit. 2; H315	< 15.00 %-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

Wash immediately with plenty of water for several minutes. Slight irritation is possible on prolonged, repeated or occluded contact.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Moderately irritating but effects are reversible and minimized with washing.

After ingestion

Call a doctor immediately and show label or packaging. Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water spray jet; Dry chemical extinguisher; Foam; Alcohol-resistant foam

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixtureIn the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO); Sulphur oxides (S_xO_y); Potassium oxide**5.3 Advice for firefighters**

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Run-off water from fire fighting must not be discharged into drains or enter surface water. Wear protective clothing.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.

For emergency responders

Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge uncontrolled into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

No special measures necessary if stored and handled as prescribed. Do not inhale dust. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust/fumes/aerosols.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Protect against humidity

Requirements for storage rooms and vessels

Store product in closed containers.

Incompatible products

Do not store together with foodstuffs. Substances to be avoided, pls. See chapter 10.

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7.3 Specific end use(s)

Industry solution

Always read the label and product information before use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium-dodecyl-sulfate			151-21-3 205-788-1	
	dermal	Long term (chronic)	systemic	4060	mg/kg
	inhalative	Long term (chronic)	systemic	285	mg/m ³
2	Docusate-sodium			577-11-7 209-406-4	
	dermal	Long term (chronic)	systemic	31.30	mg/kg/day
	inhalative	Long term (chronic)	systemic	44.10	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium-dodecyl-sulfate			151-21-3 205-788-1	
	oral	Long term (chronic)	systemic	24	mg/kg
	dermal	Long term (chronic)	systemic	2440	mg/kg
	inhalative	Long term (chronic)	systemic	85	mg/m ³
2	Docusate-sodium			577-11-7 209-406-4	
	oral	Long term (chronic)	systemic	18.80	mg/kg/day
	dermal	Long term (chronic)	systemic	18.80	mg/kg/day
	inhalative	Long term (chronic)	systemic	13.00	mg/m ³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	sodium-dodecyl-sulfate		151-21-3 205-788-1	
	water	fresh water	0.176	mg/L
	water	marine water	0.0176	mg/L
	water	fresh water sediment	6.97	mg/kg
	water	marine water sediment	0.697	mg/kg
	soil	-	1.29	mg/L
	sewage treatment plant	-	1.35	mg/L
2	Docusate-sodium		577-11-7 209-406-4	
	water	fresh water	0.0066	mg/L
	water	marine water	0.00066	mg/L
	water	Aqua intermittent	0.066	mg/L
	water	fresh water sediment	0.653	mg/kg
	with reference to: dry weight			
	water	marine water sediment	0.0653	mg/kg
	with reference to: dry weight			
	soil	-	0.138	mg/kg
	with reference to: dry weight			
sewage treatment plant	-	122.00	mg/L	

8.2 Exposure controls

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No data available.

Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust, vapour and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Form/Colour**

Powder

white

Odour

No data available

Odour threshold

No data available

pH value

Value	8.33
Concentration	1 %
Method	CIPAC MT 75.3
Source	Manufacturer

Boiling point / boiling range

No data available

Melting point / melting range

No data available

Decomposition point / decomposition range

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Oxidising properties

not oxidizing

Explosive properties

Product does not present an explosion hazard.

Flammability (solid, gas)

No data available

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No data available

Upper flammability or explosive limits

No data available

Vapour pressure

No data available

Vapour density

No data available

Evaporation rate

No data available

Relative density

No data available

Density

No data available

Bulk density

Value	1	g/cm ³
Reference substance	CAS 298-14-6	
Source	Manufacturer	

Packed bulk density

Value	0.70	g/ml
Method	CIPAC MT 186	
Source	Manufacturer	

Solubility in water

Value	332	g/l
Reference temperature	20	°C
Reference substance	CAS 298-14-6	
Source	Manufacturer	

Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

9.2 Other information**Other information**

No data available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

The product is stable under normal storage and handling conditions.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Moisture.

10.5 Incompatible materials

Acids

10.6 Hazardous decomposition products

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Thermal decomposition may emit carbon dioxide, oxides of sulphur and potassium oxide.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity			
No	Product Name		
1	KARMA		
LD50		2900	mg/kg/bw
Species	rat (male)		
Source	Manufacturer		
LD50		2600	mg/kg/bw
Species	rat (female)		
Source	Manufacturer		

Acute dermal toxicity			
No	Product Name		
1	KARMA		
LD50	>	5000	mg/kg
Species	rabbit		
Source	Manufacturer		

Acute inhalational toxicity			
No	Product Name		
1	KARMA		
LC50	>	2.3	mg/m ³
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Source	Manufacturer		
Comments	highest checkable concentration		

Skin corrosion/irritation	
No	Product Name
1	KARMA
Species	rabbit
Source	Manufacturer
Evaluation	non-irritant

Serious eye damage/irritation	
No	Product Name
1	KARMA
Species	rabbit
Source	Manufacturer
Evaluation	slightly irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation	
No	Product Name
1	KARMA
Route of exposure	Skin
Method	Buehler
Source	Manufacturer
Evaluation	non-sensitizing

Germ cell mutagenicity
No data available

Reproduction toxicity
No data available

Carcinogenicity
No data available

STOT - single exposure

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No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information**12.1 Toxicity****Toxicity to fish (acute)**

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)**No Product Name**

1 KARMA

ErC50	>	100.9	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Source	Manufacturer		
EC50	>	100.9	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Source	Manufacturer		

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No	Substance name	CAS no.	EC no.
1	sodium-dodecyl-sulfate	151-21-3	205-788-1
EC50		135	mg/l
Duration of exposure		3	h
Species	activated sludge		
Method	OECD		
Source	ECHA		

12.2 Persistence and degradability**Biodegradability**

No	Substance name	CAS no.	EC no.
1	sodium-dodecyl-sulfate	151-21-3	205-788-1
Type	CO2 formation in % of theoretical value		
Value		95	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation	readily biodegradable		
2	Docosate-sodium	577-11-7	209-406-4
Type	aerobic biodegradation		
Value		91.2	%
Duration		28	day(s)
Method	OECD 310		
Source	ECHA		
Evaluation	readily biodegradable		

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Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	sodium-dodecyl-sulfate	151-21-3	205-788-1
BCF		2.1	
Species		Cyprinus carpio	
Source		ECHA	

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

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According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XVII of the REACH regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Department issuing safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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