2015/830

pmc 6 biogenix

SAFETY DATA SHEET

Date of issue : 11 August 2021

Date of revision : 16 June 2022

Version : 0.06

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

1.1 Product identifier	
Product name	: KEMAMIDE® E; -E Export; -E Ultra; -E-60; -E-Cl; -E-EQ; -E-EXM, -E-LO; -E-MAX; - E-SN; -E-STK; -E-YPT; -E-XM; -EN; -EZ;
EC number	: 204-009-2
CAS number	: 112-84-5
Other means of identification	 13-Docosenamide, (13Z)-; 13-Docosenamide, (Z)-; Erucamide; (Z) -13-Docosenamide; Erucic amide; Aliphatic monocarboxamide (C6-24); rmoslip; Crodamide ER; Kemamide E; cis-13-Docosenamide; Erucy lamide

REACH Registration number		01-2119519225-45 -	
SDS no.	: BKEME		

••••	
Product code	: 10048-49, 10342-43, 10345, 10350-51, 10353, 10519, 10827, 10829-30, 10833, 10835, 10837, 10844-47, 10855, 10864, 10985, 10986-87, 11012, 12461, 19510, 19669, 21590, 22752-53, 24037, 24040, 24795, 25109-110, 25345, 26429, 26789, 26863, 27060, 27288, 27669, 27679, 27681, 27734, 27754, 27980, 28005, 28503, 28593, 28982, 40015, 40029, 40042, 40048, 40051-54, 40062-63, 40070, 40088, 40130, 40132, 40195, 40221-22, 40235-36, 40241, 40372, 40408, 40410, 40480, 40483, 40495, 40536, 40599, 40601, 40613, 40615, 40616, 405600, 4050304, 4051241, 4051389, 4051402, 4051405, 4051411-12, 4051432-33, 4051434, 4051454, 4051574, 4051734, 4052111, 4052868, 4052880, 4052891, 4052936
Product description	: Fatty amide derivative.
Product type	: Powder.
Chemical formula	: C22H43NO

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

Identified uses	: Plastics additives - Lubricants
Uses advised against	: Consumer applications

1.3 Details of the supplier of the safety data sheet

Supplier's details	: PMC Biogenix, Inc. 1231 Pope Street Memphis, TN 38108 USA
Company telephone number	: +1 901 325 4930
e-mail address of person responsible for this SDS	: sds@pmc-group.com

1.4 Emergency telephone number			
Telephone no.:	: Chemtrec 1-800-424-9300		
Telephone no.:	: Chemtrec [INT]: +1-703-527-38	387	

SECTION 2: Hazards identification

		SECTION	2: Haz	ards Id	entitic	ation		
2.1 Classification of the sub	star	nce or mixture)					
Product definition	:	Mono-constitu	uent subst	ance				
Classification according to	Re	gulation (EC)	<u>No. 1272</u>	/2008 [CLI	<u>P/GHS]</u>			
Not classified.								
The product is not classified	as h	nazardous acco	ording to F	Regulation	(EC) 1272	2/2008 as ame	nded.	
See Section 11 for more deta	ailec	l information or	n health e	ffects and	symptoms	5.		
2.2 Label elements								
Signal word	:	No signal wor	d.					
Hazard statements	:	No known sig	nificant ef	fects or cri	tical haza	rds.		
Precautionary statements								
General	:	Not applicable	Э.					
Prevention		Not applicable						
Response	:	Not applicable	Э.					
Storage	:	Not applicable	Э.					
Disposal	:	Not applicable	Э.					
Hazardous ingredients	:	Not applicable	9					
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable						
Special packaging requirem	nent	ts						
Containers to be fitted with child-resistant fastenings	:	Not applicable						
Tactile warning of danger	:	Not applicable						
2.3 Other hazards								
Product meets the criteria	:	PBT	Р	В	Т	vPvB	vP	vB
for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII		No	N/A	N/A	No	N/A	N/A	N/A

Other hazards which do not result in classification

: May form combustible dust concentrations in air.

SECTION 3: Composition/information on ingredients

3.1 Substances : Mono-constituent substance

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
(Z)-docos-13-enamide	REACH #: 01-2119519225-45 EC: 204-009-2 CAS: 112-84-5	100	Not classified.	[A]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Туре

BKEME

KEMAMIDE® E; -E Export; -E Ultra; -E-60; -E-CI; -E-EQ; -E-EXM, -E-LO; -E-MAX; -E-SN; -E-STK; -E-YPT; -E-XM; -EN; -EZ;

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SECTION 3: Composition/information on ingredients

[A] Constituent

[B] Impurity

[C] Stabilising additive

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Contact with hot material causes thermal skin burns. In case of burns, immediately cool affected skin with cold water and continue for as long as possible or apply wet cloths to the area until medical attention can be obtained.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical powder.
Unsuitable extinguishing media	: Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
5.2 Special hazards arising f	rom the substance or mixture
Hazards from the	: May form explosible dust-air mixture if dispersed.

substance or mixture

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	E Export; -E Ultra; -E-60; -E-Cl; -E-EQ; -E-EXM, -E-LO; -E- Date of revision : 16 June 2022 TK; -E-YPT; -E-XM; -EN; -EZ;
	SECTION 5: Firefighting measures
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Additional information	: Fine dust clouds may form explosive mixtures with air.
S	ECTION 6: Accidental release measures
6.1 Personal precautions, pro	otective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and material for	containment and cleaning up
Small spill	: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Hazard of slipping on spilt product. Where possible allow molten material to solidify naturally
Large spill	: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Hazard of slipping on spilt product. Where possible allow molten material to solidify naturally

6.4 Reference to other
sections: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

KEMAMIDE® E; -E Export; -E Ultra; -E-60; -E-Cl; -E-EQ; -E-EXM, -E-LO; -E- Date of r MAX; -E-SN; -E-STK; -E-YPT; -E-XM; -EN; -EZ;

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	SECTION 7: Handling and storage
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)	
Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

(Z)-docos-13-enamide	Regulation on Limit Values - MAC (Austria). TWA: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust TWA: 5 mg/m³, (Dust) 8 hours. Form: Respirable fraction
(Z)-docos-13-enamide	Limit values (Belgium). TWA: 3 mg/m³, (Particulates, not otherwise regulated) 8 hours. Form: Respirable fraction TWA: 10 mg/m³, (Particulates, not otherwise regulated) 8 hours. Form: Total particulates
(Z)-docos-13-enamide	Working Environment Authority (Denmark). GV: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust
(Z)-docos-13-enamide	Ministry of Labor (France). VME: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust
(Z)-docos-13-enamide	 TRGS 900 OEL (Germany). Schichtmittelwert: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust Schichtmittelwert: 1.25 mg/m³, (Dust) 8 hours. Form: Respirable dust DFG MAC-values list (Germany). Schichtmittelwert: 4 mg/m³, (Dust) 8 hours. Form: Inhalable Dust Schichtmittelwert: 0.3 mg/m³, (Dust) 8 hours. Form: Respirable dust

KEMAMIDE® E; -E Export; -E Ultra; -E-60; -E-Cl; -E-EQ; -E-EXM, -E-LO; -E- Date of revision : 16 June 2022 MAX; -E-SN; -E-STK; -E-YPT; -E-XM; -EN; -EZ;

SECTION 8: Exposure controls/personal protection 5/2020. (II. 6.) ITM Decree (Hungary). (Z)-docos-13-enamide TWA: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust TWA: 6 mg/m³, (Dust) 8 hours. Form: Respirable dust (Z)-docos-13-enamide Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland). TWA: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust National institute of occupational safety and health (Spain). (Z)-docos-13-enamide VLA-ED: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust VLA-ED: 3 mg/m³, (Dust) 8 hours. Form: Respirable dust Work environment authority Regulation 2020:6 (Sweden). (Z)-docos-13-enamide NGV: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust NGV: 5 mg/m³, (Dust) 8 hours. Form: Respirable fraction SUVA (Switzerland). (Z)-docos-13-enamide MAK: 10 mg/m³, (Dust) 8 hours. Form: Inhalable Dust MAK: 3 mg/m³, (Dust) 8 hours. Form: Respirable dust : If this product contains ingredients with exposure limits, personal, workplace **Recommended monitoring** atmosphere or biological monitoring may be required to determine the effectiveness procedures of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
(Z)-docos-13-enamide	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	10.78 mg/ m ³	General population	Systemic
	DNEL	Long term Inhalation	43.73 mg/ m³	Workers	Systemic
	DNEL	Short term Inhalation	219 mg/m ³	General population	Local

PNECs

No PNECs available

8.2 Exposure controls

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Appropriate engineering controls
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: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

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SECT	ION 8: Exposure controls/personal protection
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Solid. [Flakes. molten Pastille Pellets. Powder.]
Colour	: Not available.
Odour	: Characteristic. [Slight]
Odour threshold	: Not available.
Melting point/freezing point	: 75 to 85°C [OECD 102]
Softening point	: Not available.
Sublimation temperature	: Not available.
Initial boiling point and boiling range	: Decomposes
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not applicable.
Flash point	: Closed cup: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: 288°C
рН	Not applicable.
Viscosity	: Kinematic: Not applicable.

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SECTI	ON 9: Physical and chemical properties
Solubility(ies)	: Very slightly soluble in the following materials: acetone. Insoluble in the following materials: cold water and hot water.
Solubility in water	: 0 g/l
Miscible with water	: No.
Partition coefficient: n-octanol/ water	: 8
Vapour pressure	: 0 kPa
Evaporation rate	: Not applicable.
Relative density	: 1
Density	: 0.815 g/cm³ [130°C (266°F)]
Vapour density	: Not applicable.
Explosive properties	: Fine dust clouds may form explosive mixtures with air.
Oxidising properties	: No oxidising ingredients present.
Particle characteristics	
Median particle size	: Not available.
Kst	: 214 bar.m/s

9.2 Other information Molecular weight

: 337 g/mole

	SECTION 10: Stability and reactivity
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials Strong oxidiser
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
(Z)-docos-13-enamide	LD50 Dermal LD50 Oral	Rat Rat	>2000 mg/kg >5000 mg/kg	-
Conclusion/Summary	Based on available data, the cla	assification criter	ia are not met.	

Acute toxicity estimates

BKEME

KEMAMIDE® E; -E Export; -E Ultra; -E-60; -E-CI; -E-EQ; -E-EXM, -E-LO; -E-MAX; -E-SN; -E-STK; -E-YPT; -E-XM; -EN; -EZ;

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SECTION 11: Toxicological information

N/A

Irritation/Corrosion

Conclusion/Summary

Skin Eyes : Non-irritating to the skin.

: No significant irritation expected other than possible mechanical irritation.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
(Z)-docos-13-enamide	skin	Mouse	Not sensitizing

Conclusion/Summary

Skin

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

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met. Reproductive toxicity Conclusion/Summary : Based on available data, the classification criteria are not met. Teratogenicity Conclusion/Summary : Based on available data, the classification criteria are not met. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Not available. Specific target organ toxicity (repeated exposure) Not available. Not available. Aspiration hazard Not available. Not available. Specific target organ toxicity (repeated exposure) Not available. Not available. f exposure : Not available. f exposure : Not available. f exposure : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Vapour may be irritating eyes and respiratory system. Skin contact : Contact with hot material causes thermal skin burns.	Product/ingredient name	Test	Experiment	Result
473 In vitro Mammalian Chromosomal Aberration Test 476 In vitro Mammalian Cell Gene Mutation Test 3ubject: Mammalian-Human Negative Conclusion/Summary : Based on available data, the classification criteria are not met. Negative Carcinogenicity : Based on available data, the classification criteria are not met. Negative Conclusion/Summary : Based on available data, the classification criteria are not met. Negative Teratogenicity : Based on available data, the classification criteria are not met. Negative Conclusion/Summary : Based on available data, the classification criteria are not met. Specific target organ toxicity (single exposure) Not available. : Based on available data, the classification criteria are not met. Specific target organ toxicity (repeated exposure) Not available. : Based on available. : Specific target organ toxicity (repeated exposure) Not available. : Not available. : Sposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Vapour may be irritating eyes and res	(Z)-docos-13-enamide			Negative
Chromosomal Aberration Test 476 In vitro Mammalian Cell Gene Mutation Test 476 In vitro Mammalian Cell Gene Mutation Test Subject: Mammalian-Human Negative Conclusion/Summary : Based on available data, the classification criteria are not met. Carcinogenicity : Based on available data, the classification criteria are not met. Reproductive toxicity : Based on available data, the classification criteria are not met. Reproductive toxicity : Based on available data, the classification criteria are not met. Conclusion/Summary : Based on available data, the classification criteria are not met. Teratogenicity : Based on available data, the classification criteria are not met. Conclusion/Summary : Based on available data, the classification criteria are not met. Specific target organ toxicity (single exposure) Not available. Not available. : Specific target organ toxicity (repeated exposure) Not available. : Not available. Aspiration hazard : Not available. Not available. : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Vapour may be irritating eyes and respiratory system. Skin contact :				N
Aberration Test 476 in vitro Mammalian Cell Gene Mutation Test Vell Gene Mutation Test Subject: Mammalian-Human Negative Conclusion/Summary : Based on available data, the classification criteria are not met. Carcinogenicity Conclusion/Summary : Based on available data, the classification criteria are not met. Reproductive toxicity Eased on available data, the classification criteria are not met. Conclusion/Summary : Based on available data, the classification criteria are not met. Teratogenicity Conclusion/Summary : Based on available data, the classification criteria are not met. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Specific target organ toxicity (repeated exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Specific target organ toxicity (repeated exposure) Yot available. Specific target organ toxicity (repeated exposure) Specific target organ toxicity (repeated exposure) Not available. Specific target organ toxicity (repeated exposure) Specific target organ toxicity (repeated exposure) Not available. Specific target organ toxicity (repeated exposure)				Negative
476 In vitro Mammalian Cell Gene Mutation Test Experiment: In vitro Subject: Mammalian-Human Negative Conclusion/Summary : Based on available data, the classification criteria are not met. Carcinogenicity : Based on available data, the classification criteria are not met. Reproductive toxicity : Based on available data, the classification criteria are not met. Conclusion/Summary : Based on available data, the classification criteria are not met. Ieratogenicity : Conclusion/Summary Conclusion/Summary : Based on available data, the classification criteria are not met. Ieratogenicity : Conclusion/Summary Conclusion/Summary : Based on available data, the classification criteria are not met. Specific target organ toxicity (single exposure) Not available. Not available. : Specific target organ toxicity (repeated exposure) Not available. Not available. : Aspiration hazard : Not available. : fexposure : Potential acute health effects : Eye contact : : Inhalation : : : : : : <td></td> <td></td> <td>Subject: Mammalian-Animal</td> <td></td>			Subject: Mammalian-Animal	
Cell Gene Mutation Test Subject: Mammalian-Human Conclusion/Summary : Based on available data, the classification criteria are not met. Carcinogenicity Conclusion/Summary : Based on available data, the classification criteria are not met. Reproductive toxicity Conclusion/Summary : Based on available data, the classification criteria are not met. Teratogenicity Conclusion/Summary : Based on available data, the classification criteria are not met. Teratogenicity Conclusion/Summary : Based on available data, the classification criteria are not met. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Not available. Aspiration hazard Not available. Specific target forgan toxicity (repeated exposure) Not available. Specific target organ toxicity (repeated exposure) Intervent : Not available. f exposure : Not available. f exposure : Exposure to airborne concentrations above			Experiment: In vitro	Negative
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	Inhalation	limits may cause irritat	ion of the nose, throat and lungs. Va	
Ingestion : No known significant effects or critical hazards.	Skin contact	: Contact with hot mater	ial causes thermal skin burns.	
	Ingestion	: No known significant e	ffects or critical hazards.	

Symptoms related to the physical, chemical and toxicological characteristics

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	SECTION 11: Toxicological information
Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effect	ts as well as chronic effects from short and long-term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
Not available.	
Conclusion/Summary	: Based on available data, the classification criteria are not met.
General	: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Other information

Product/ingredient name	Result	Species	Exposure
(Z)-docos-13-enamide	EC50 >100 ppm	Algae - Pseudokirchneriella subcapitata	
	NOEC >77 ppm	Crustaceans	21 days
	NOEC >105 ppm	Fish - Danio Rerio	28 days
Conclusion/Summary	: No known significant effects or critical hazards.		

Ozone depleting substances - Not applicable.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
(Z)-docos-13-enamide	301B Ready Biodegradability - CO2 Evolution Test		-	-
	-	>60 % - Readily - 28 days	-	-
Conclusion/Summary		, ,		1

Conclusion/Summary : Readily biodegradable

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SECTION 12: Ecological information				
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
(Z)-docos-13-enamide	-	-	Readily	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
(Z)-docos-13-enamide	8	-	high

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
(Z)-docos-13-enamide	No	N/A	N/A	No	N/A	N/A	N/A

12.6 Other adverse effects

: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

<u>Product</u>	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	 Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information								
	ADR/RID	ADR/RID ADN IMDG IATA						
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.				
14.2 UN proper shipping name	-	-	-	-				

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SECTION 14: Transport information					
14.3 Transport hazard class(es)	-	-	-	-	
14.4 Packing group	-	-	-	-	
14.5 Environmental hazards	No.	No.	No.	No.	

14.6 Special precautions for	:	Transport within user's premises: always transport in closed containers that are
user		upright and secure. Ensure that persons transporting the product know what to do in
		the event of an accident or spillage.

14.7 Transport in bulk	: Not available.
according to IMO	
instruments	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Other EU regulations		
Industrial emissions (integrated pollution prevention and control) - Air	:	Not listed
Industrial emissions (integrated pollution prevention and control) - Water	:	Not listed
Ozone depleting substanc	es	<u>(1005/2009/EU)</u>
Not listed.		
Prior Informed Consent (P	<u>IC)</u>	<u>(649/2012/EU)</u>
Not listed.		

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

<u>Germany</u>

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MAA, -E-SN, -E-STR, -E-TFT, -E-AM, -EN, -EZ,				
	SECTION 15: Regulatory information			
Storage class (TRGS 510)				
Hazard class for water	: 1			
<u>Italy</u>				
D.Lgs. 152/06	: Not determined.			
<u>Netherlands</u> Water Discharge Delieu	(4) Low borned for any stic enconisme, near house lang terms borned as affects in			
Water Discharge Policy (ABM)	: A(4) Low hazard for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A			
International regulations				
Chemical Weapon Conventi Not listed.	ion List Schedules I, II & III Chemicals			
Montreal Protocol				
Not listed.				
Stockholm Convention on Persistent Organic Pollutants				
Not listed.				
Rotterdam Convention on Prior Informed Consent (PIC) Not listed.				
UNECE Aarhus Protocol on	POPs and Heavy Metals			
Not listed.				
Inventory list				
Australia	: This material is listed or exempted.			
Canada	: This material is listed or exempted.			
China	: This material is listed or exempted.			
Europe	: This material is listed or exempted.			
Japan	 Japan inventory (CSCL): This material is listed or exempted. Japan inventory (ISHL): Not determined. 			
New Zealand	: This material is listed or exempted.			
Philippines	: This material is listed or exempted.			
Republic of Korea	: This material is listed or exempted.			
Taiwan	: This material is listed or exempted.			
Thailand	: This material is listed or exempted.			
Turkey	: This material is listed or exempted.			
United States	: This material is active or exempted.			
Viet Nam	: This material is listed or exempted.			
15.2 Chemical safety assessment	: Not available.			
SECTION 16: Other information				
	as changed from previously issued version.			
Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement 			
	N/A = Not available PBT = Persistent, Bioaccumulative and Toxic			

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SECTION 16: Other information

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP/GHS]

Not applicable.

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Notice to reader

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