

According to Regulation (EU) No 2015/830

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Product code	: SHELL AIRFRESHENER LITTLE JOYA ROYAL TEA : CRX767, AL65A
1.2. Relevant identified us	ses of the substance or mixture and uses advised against
Application	: SU21 Consumer product. PC3 Air care products. Airfreshener.

1.3. Details of the supplier of the safety data sheet

Supplier	: Kemetyl Kimya Sanayi ve Ticaret Limited Sirketi Küçükbakkalköy Mah. Dereboyu Cad. Brandium AVYM R5 Blok D:82 Ataşehir / Istanbul, Turkey
	: +908503030587 : msds@kemetyl.com : www.kemetyl.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only: TR - Telephone : +908503030587

(During office hours only)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC)	:	Eye irritation, category 2. Skin sensitization, category 1. Hazardous to the aquatic environment — Chronic category 3.
Human health hazards Physical/chemical hazards Environmental hazards	:	Causes serious eye irritation. May cause an allergic skin reaction. Not classified as dangerous according to statutory EC-Directives. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements (1272/2008/EC): Hazard pictograms :



Signal word	: Warning	
H- and P-phrases	: H319 H317 H412 P101	Causes serious eye irritation. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects. If medical advice is needed, have product container or label at hand.
	P102 P273 P280 gloves P302+P352 P333+P313 P501	Keep out of reach of children. Avoid release to the environment. Wear protective gloves. IF ON SKIN: Wash with plenty of water/soap. If skin irritation or rash occurs: Get medical advice/attention. Dispose of contents/container to an official chemical waste depot.



According to Regulation (EU) No 2015/830

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases: Hazard pictograms



	•	
Signal word	: Warning	
H- and P-phrases	: H317	May cause an allergic skin reaction.
	H412	Harmful to aquatic life with long lasting effects.
	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P280 gloves	Wear protective gloves.
	P302+P352	IF ON SKIN: Wash with plenty of water/soap.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Linalyl acetate ; Geranyl acetate ; 4-tert-Butylcyclohexyl acetate ; Pentadecan-15-olide .

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration	CAS nr.		EC number	Remark	REACH nr.
	(w/w) (%)					
2-Cyclohexylidene-2-phenylacetonitrile	< 3	10461-9	8-0	423-740-1		
Linalyl acetate	< 3	115-95-	7	204-116-4		01-2119454789-19
Geranyl acetate	< 3	105-87-	3	203-341-5		01-2119973480-35
Phenethyl acetate	< 3	103-45-	7	203-113-5		
4-tert-Butylcyclohexyl acetate	< 3	32210-2	23-4	250-954-9		01-2119976286-24
Pentadecan-15-olide	< 1	106-02-	5	203-354-6		01-2119987323-31
Substance name	Hazard Class		H-phras	ses	Pictograms	[
2-Cyclohexylidene-2-phenylacetonitrile	Acute Tox. 4; Ac	quatic	H302; F	1411	GHS07; GHS09	
	Chronic 2					
Linalyl acetate	Skin Irrit. 2; Skin Ser		H315; H	H317; H319	GHS07; GHS07;	
	1B; Eye Irrit. 2				GHS07	
Geranyl acetate	Skin Irrit. 2; Skin Sens		H315; F	H317; H412	GHS07; GHS07	
-	1B; Aquatic Chr	onic 3				
Phenethyl acetate	Eye Dam. 1		H318		GHS05	
4-tert-Butylcyclohexyl acetate	Skin Sens. 1B		H317		GHS07	
Pentadecan-15-olide	Skin Sens. 1B; / Chronic 2	Aquatic	H317; ŀ	1411	GHS07; GHS09	

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

Product name Date of issue



According to Regulation (EU) No 2015/830

4.1. Description of first aid measures

First aid measures	
Inhalation	: Not applicable under normal conditions of use. Consult a doctor if victim feels unwell.
Skin contact	: Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up.
	Consult a doctor if irritation occurs.
Eye contact	: Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor.
Ingestion	: Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

4.2. Most important symptoms and effects, both acute and delayed

Effects and symptoms	
Inhalation	: No specific effects and/or symptoms are known.
Skin contact	: May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.
Eye contact	: Irritant. May cause redness and pain.
Ingestion	: May cause a feeling of sickness, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media	
Suitable	: Carbondioxide (CO2). Foam. Dry chemical. Water fog.
Not suitable	: Water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	None known.
Hazardous thermal	:	Carbon monoxide may be evolved if incomplete combustion occurs.
decomposition products		

5.3. Advice for firefighters

: Use adequate respiratory equipment in case of insufficient ventilation. Special protective equipment for fire-fighters

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water. Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up



According to Regulation (EU) No 2015/830

Kemetyl

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling

: Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Non recommended 2 None known.		
-------------------------------	--	--

7.3. Specific end use(s)

Use

: Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure	: Occupational exposure limits have not been established for this product. Derived no-effect levels
limits	(DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have
	not been established for this product.

Derived no-effect level (DNEL) for workers:

Chemical name	Route of	DNEL, short-term		DNEL, long-term	
	exposure				
		Local effect	Systemic effect	Local effect	Systemic effect
2-Cyclohexylidene-2-phenylacetonitrile Dermal					4 mg/kg bw/day
	Inhalation				1,4 mg/m3
Linalyl acetate	Dermal	0,2362 mg/kg		0,2362 mg/kg	2,5 mg/kg bw/day
		bw		bw/day	
	Inhalation			-	2,75 mg/m3
Geranyl acetate	Inhalation				62,59 mg/m3
	Dermal				35,5 mg/kg bw/day
Phenethyl acetate	Inhalation				6,5 mg/m3
	Dermal				2,27 mg/kg bw/day

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of	DNEL, short-term		DNEL, long-term	
	exposure				
		Local effect	Systemic effect	Local effect	Systemic effect
2-Cyclohexylidene-2-phenylacetonitrile	Inhalation				0,34 mg/m3
	Dermal				4 mg/kg bw/day
	Oral				0,5 mg/kg bw/day
Linalyl acetate	Dermal	0,2362 mg/kg		0,2362 mg/kg	1,25 mg/kg bw/day
		bw		bw/day	
	Inhalation				0,68 mg/m3



According to Regulation (EU) No 2015/830

Kemetyl

	Oral		0,2 mg/kg bw/day
Geranyl acetate	Inhalation		15,4 mg/m3
	Dermal		17,75 mg/kg bw/day
	Oral		8,9 mg/kg bw/day
Phenethyl acetate	Inhalation		1,61 mg/m3
	Dermal		1,14 mg/kg bw/day
	Oral	2,5 mg/kg bw	0,42 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Linalyl acetate	Water	0,011 mg/l	0,001 mg/l	
	Sediment	0,609 mg/kg	0,061 mg/kg	
	Intermittent water			0,11 mg/l
	STP			1 mg/l
	Soil			0,115 mg/kg
Geranyl acetate	Water	0,00372 mg/l	0,000372 mg/l	
	Sediment	0,442 mg/kg	0,442 mg/kg	
	Intermittent water			0,0372 mg/l
	STP			8 mg/l
	Soil			0,0859 mg/kg
Phenethyl acetate	Water	0,11 mg/l	0,011 mg/l	
	Sediment	0,128 mg/kg	0,0128 mg/kg	
	Intermittent water			0,105 mg/l
	STP			10 mg/l
	Soil			0,019 mg/kg
4-tert-Butylcyclohexyl acetate	Water	0,0053 mg/l	0,00053 mg/l	
	Sediment	2,01 mg/kg	0,21 mg/kg	
	Intermittent water			0,053 mg/l
	STP			12,2 mg/l
	Soil			0,42 mg/kg
	Oral			66,76 mg/kg food
Pentadecan-15-olide	Water	0,0027 mg/l	0,00027 mg/l	
	Sediment	21 mg/kg	4,2 mg/kg	
	STP			10 mg/l
	Soil			10 mg/kg

8.2. Exposure controls

: Comply with standard precautionary measures for working with chemicals. : When using do not eat, drink or smoke.

Engineering measures Hygienic measures

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: nitril. Indication of permeation breakthrough time: 4 hours. Respiratory protection Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale : exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.

Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. ± 0,5 mm. Indication of permeation breakthrough time: 4 hours.



According to Regulation (EU) No 2015/830

Eye protection

: Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Colour Odour Odour threshold	 Liquid. Light yellow. Perfumed. Not known. 	Impregnated material.
pH	: Not applicable.	Waterfree product.
Solubility in water	: Not soluble.	
Partition coefficient (n-oc- tanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 225 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: Not known.	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,7 (Linalyl acetate)
	:	Upper explosion limit in air (%): 4,3 (Linalyl acetate)
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Vapour density (20°C)	: >1	(air = 1)
Relative density (20°C)	: 1 g/ml	
Evaporation rate	: Not known.	(n-butyl acetate = 1)

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity				
Reactivity	: See sub-sections below.			
10.2. Chemical stability				
Stability	: Stable under normal conditions.			
10.3. Possibility of hazardous reactions				
Reactivity	: No other hazardous reactions known.			
10.4. Conditions to avoid				
Conditions to avoid	: See section 7.			
10.5. Incompatible materials				
Materials to avoid	: Keep away from oxidizing agents.			



*

According to Regulation (EU) No 2015/830

10.6. Hazardous decomposition products

Hazardous decomposition : Not known. products

TOXICOLOGICAL INFORMATION SECTION 11

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological research has been carried out on this product.

Inhalation	
Acute toxicity	: Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 6 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation	: Not classified - based on available data, the classification criteria are not met.
Sensitisation	Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
Carcinogenicity	 Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
Skin contact	
Acute toxicity	: Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation	: Not classified - based on available data, the classification criteria are not met.
Sensitisation	: May cause sensitisation by skin contact. May produce an allergic reaction.
Mutagenicity	: Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
Eye contact	
Corrosion/irritation	: Irritant.
Ingestion	
Acute toxicity	: Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Aspiration	Not classified - based on available data, the classification criteria are not met. Does not contain substances with an aspiration hazard.
Corrosion/irritation	: May cause a feeling of sickness, vomiting and diarrhoea.
Carcinogenicity	Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
Reprotoxicity	: Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Linalyl acetate		1000 mg/kg bw/d	OECD 414	Rat
	LD50 (oral)	13934 mg/kg bw		Rat
	LC50 (inhalation)	> 2740 mg/m3		Mouse
	Skin irritation	Non-irritant		Human
	Skin irritation	Irritant	OECD 404	Rabbit
	Eye irritation	Irritant	OECD 405	Rabbit
	NOAEL (oral)	160 mg/kg bw/d	OECD 407	Rat
	NOAEL (dermal)	250 mg/kg bw/d	OECD 411	Rat
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium



Safety data sheet According to Regulation (EU) No 2015/830

	Genotoxicity - in vitro	Not genotoxic	OECD 476	Mouse
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	NOAEL (development, oral)	> 1000 mg/kg bw/d	OECD 414	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
Geranyl acetate	Skin irritation	Moderately irritant	0ECD 429	Guinea pig
Geranyracelale	Skin sensitisation	Sensitizing.		Guinea pig
		•	Read across	Rat
	NOEL (carcinogenicity) - estimate			
	NOAEL (dermal) - estimate	1000 mg/kg bw/d	Read across	Mouse
	LD50 (dermal)	> 5460 mg/kg bw		Rabbit
	LD50 (oral)	6330 mg/kg bw		Rat
	Mutagenicity	Negative	OECD 471	
Phenethyl acetate	LD50 (oral)	5000 mg/kg bw	OECD 401	Rat
	LC50 (inhalation)	> 766 mg/m3		Rat
	LD50 (dermal)	6210 mg/kg bw	OECD 402	Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - estimate		Read across	
	Skin irritation	Non-irritant	OECD 404	Rabbit
	Eve irritation	Highly irritant		Rabbit
	NOEL (carcinogenicity, oral)	> 300 mg/kg bw/d		Mouse
	NOAEL (development) - estimate	500 mg/kg.d	Read across	
	NOAEL (fertility) -	500 mg/kg.d	Read across	
	estimate			Cuince siz
	Skin sensitisation	Not sensitizing	Deedeeree	Guinea pig
	NOAEL (oral) - estimate	250 mg/kg bw/d	Read across	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat
4-tert-Butylcyclohexyl acetate	LD50 (oral)	5000 mg/kg bw		Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Eye irritation	Non-irritant		Rabbit
	Skin irritation	Non-irritant		Rabbit
	NOAEL (oral) - estimate	710 mg/kg bw/d	Read across	
Pentadecan-15-olide	Genotoxicity - in vivo	> 1600 mg/kg bw/d		Mouse
	LD50 (oral)	> 5000 mg/kg bw		Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Skin irritation	Slightly irritant	OECD 404	Rabbit
	Skin irritation	Non-irritant	Patch test	Human
	NOAEL (fertility) -	> 1000 mg/kg.d	Read across	Rat
	estimate			
		> 1000 mg/kg.d	Read across	Rat
	NOAEL (oral) - estimate	> 1000 mg/kg bw/d	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - estimate	Not genotoxic		
	Skin sensitisation	5450 ug/cm2	OECD 429	Mouse



According to Regulation (EU) No 2015/830

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

No ecotoxicological research has been carried out on this product.

: Harmful to aquatic organisms. Calculated LC50 (fish): 35 mg/l. Calculated EC50 (waterflea): 20 mg/ I. Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence - degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
2-Cyclohexylidene-2-phenylacetonitrile	Ultimate aerobic	86 %	OECD 301 F	
	biodegradation (%)			
	LC50 (fish)	1,4 mg/l	OECD 203	Oncorhynchus mykiss
	EC50 (waterflea)	2,3 mg/l	OECD 202	Daphnia magna
	NOEC (algae)	0,5 mg/l	OECD 201	Selenastrum
	-			capricornutum
	IC50 (algea)	0,86 mg/l	OECD 201	Selenastrum
				capricornutum
2-Cyclohexylidene-2-phenylacetonitrile	Log P(ow)	4,51		
Geranyl acetate	Ultimate aerobic	> 70 %		
	biodegradation (%)			
	IC50 (algea)	3,72 mg/l	OECD 201	Desmodesmus
				subspicatus
	EC50 (waterflea)	14,1 mg/l		Daphnia magna
	LC50 (fish) - estimate	68 mg/l		Leuciscus idus
Geranyl acetate	Log P(ow)	4,3		
Geranyl acetate	BCF	235		

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues	: Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat
	product residues, impregnated wipes and non-empty pack as hazardous waste.
Additional warning	: None.
Waste water discharge	: Do not dispose into the environment, in drains or in water courses.



According to Regulation (EU) No 2015/830

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot. Local legislation Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number or ID number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class	: This product is not classified according to ADR/RID/ADN.
IMDG (sea) Class Marine pollutant	: This product is not classified according to IMDG. : No
IATA (air) Class	: This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Maritime transport in bulk according to IMO instruments

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

15.2. Chemical safety assessment

Chemical safety : Not applicable. assessment

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Product name Date of issue

: 2019-04-17



According to Regulation (EU) No 2015/830

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ATE: Acute Toxicity EstimateCLP: Classification, Labeling & PackagingCMR: Carcinogenic, Mutagenic or toxic for ReproductionEEC: European Economic CommunityGHS: Globally Harmonized System of Classification and Labelling of ChemicalsIATA: International Air Transport AssociationIBC code: International Bulk Chemical CodeIMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of ChemicalsRID: Regulations concerning the International Carriage of Dangerous Goods by Bail	ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
CMR: Carcinogenic, Mutagenic or toxic for ReproductionEEC: European Economic CommunityGHS: Globally Harmonized System of Classification and Labelling of ChemicalsIATA: International Air Transport AssociationIBC code: International Bulk Chemical CodeIMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	ATE	: Acute Toxicity Estimate
EEC: European Economic CommunityGHS: Globally Harmonized System of Classification and Labelling of ChemicalsIATA: International Air Transport AssociationIBC code: International Bulk Chemical CodeIMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	CLP	: Classification, Labeling & Packaging
GHS: Globally Harmonized System of Classification and Labelling of ChemicalsIATA: International Air Transport AssociationIBC code: International Bulk Chemical CodeIMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
IATA: International Air Transport AssociationIBC code: International Bulk Chemical CodeIMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	EEC	: European Economic Community
IBC code: International Bulk Chemical CodeIMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IMDG: International Maritime Dangerous Goods CodeLD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	IATA	: International Air Transport Association
LD50/LC50: Lethal Dose/Concentration for 50% of a populationMAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	IBC code	: International Bulk Chemical Code
MAC: Maximum Allowable ConcentrationMARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	IMDG	: International Maritime Dangerous Goods Code
MARPOL: International Convention for the Prevention of Pollution From ShipsNO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	LD50/LC50	: Lethal Dose/Concentration for 50% of a population
NO(A)EL: No Observed (Adverse) Effect LevelOECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	MAC	: Maximum Allowable Concentration
OECD: Organisation for Economic Co-operation and DevelopmentPBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	MARPOL	: International Convention for the Prevention of Pollution From Ships
PBT: Persistent, Bioaccumulative and ToxicPC: Chemical product categoryPT: Product typeREACH: Registration, Evaluation, Authorisation and Restriction of Chemicals	NO(A)EL	: No Observed (Adverse) Effect Level
PC : Chemical product category PT : Product type REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals	OECD	: Organisation for Economic Co-operation and Development
PT : Product type REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals	PBT	: Persistent, Bioaccumulative and Toxic
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals	PC	: Chemical product category
	PT	: Product type
RID · · · · Regulations concerning the International Carriage of Dangerous Goods by Rail	REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
	RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP : Sewage Treatment Plant	STP	: Sewage Treatment Plant
SU : Sector of Use	SU	: Sector of Use
TWA/STEL : Time-Weighted Average/Short Term Exposure Limit	TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN : United Nations	UN	: United Nations
VOC : Volatile Organic Compounds	VOC	
vPvB : Very Persistent and Very Bioaccumulative	vPvB	: Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Eye Irrit. 2	: Calculation method.
Eye IIII. Z	
Skin Sens. 1/1A/1B	: Calculation method.
Aquatic Chronic 3	: Calculation method.

Full text of hazard classes mentioned in section 3:

Acute Tox. 4	:	Acute toxicity, category 4.
Skin Irrit. 2	:	Skin irritation, category 2.
Eye Dam. 1	:	Serious eye damage, category 1.
Eye Irrit. 2	:	Eye irritation, category 2.
Skin Sens. 1/1A/1B	:	Skin sensitization, category 1/1A/1B.
Aquatic Chronic 2	:	Hazardous to the aquatic environment - Chronic category 2.
Aquatic Chronic 3	:	Hazardous to the aquatic environment — Chronic category 3.

Full text of H-phrases mentioned in section 3:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Advice on any training appropriate for workers: none.



According to Regulation (EU) No 2015/830

Number format

: "," used as decimal separator.

End of safety data sheet.

Print date

: 2021-08-16