

Version	Revision Date:	SDS Number:
10.0	14.05.2021	S00054320466

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

1.1 Product identifier

Trade name	:	KUNG FU
Design code	:	A12688A
Product Registration Number	:	MAPP 18974
Unique Formula Identifier (UFI)	:	DMM3-D08A-Q004-X4D8

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

Use of the Substance/Mixture	:	Insecticide
Recommended restrictions on use	:	professional use

1.3 Details of the supplier of the safety data sheet

Company	:	Syngenta UK Limited CPC4, Capital Park Fulbourn, Cambridge CB21 5XE United Kingdom
Telephone	:	+44 (0) 1223 883400
Telefax	:	+44 (0) 1223 882195
E-mail address of person responsible for the SDS	:	customer.services@syngenta.com

1.4 Emergency telephone number

Emergency telephone	: +44 1484 538444
number	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 Skin sensitisation, Category 1	H302: Harmful if swallowed. H317: May cause an allergic skin reaction.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.



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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	!	
Signal word	Warning	
Hazard statements	H302 Harmful if swallowed.H317 May cause an allergic skin reaction.H410 Very toxic to aquatic life with long lasting eff	iects.
Supplemental Hazard Statements	EUH401 To avoid risks to human hea environment, comply with the instructions for use.	alth and the
Precautionary statements	 P102 Keep out of reach of children. Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapo P264 Wash skin thoroughly after handling. P280 Wear protective gloves. 	urs/ spray.
	Response: P333 + P313 If skin irritation or rash occurs: Get r advice/ attention. P362 + P364 Take off contaminated clothing and before reuse. P391 Collect spillage.	
	Disposal: P501 Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple rinsed clean containers which can be disposed hazardous waste.	or empty

Hazardous components which must be listed on the label:

lambda-cyhalothrin (ISO) 1,2-benzisothiazol-3(2H)-one

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.



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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)
Registration number 91465-08-6 415-130-7 607-252-00-6	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H330 Acute Tox. 3; H311 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10,000 M-Factor (Chronic aquatic toxicity): 10,000	>= 2.5 - < 10
Not Assigned 922-153-0 01-2119451097-39	Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 2.5 - < 10
13463-67-7 236-675-5 022-006-00-2 01-2119489379-17	Carc. 2; H351	>= 0.1 - < 1
2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 0.1 - < 0.25
	M-Factor (Acute aquatic toxicity): 1 specific concentration limit Skin Sens. 1; H317 >= 0,05 %	
	EC-No. Index-No. Registration number 91465-08-6 415-130-7 607-252-00-6 Not Assigned 922-153-0 01-2119451097-39 13463-67-7 236-675-5 022-006-00-2 01-2119489379-17 2634-33-5 220-120-9 613-088-00-6	EC-No. Index-No. Registration number Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H330 Acute Tox. 3; H311 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10,000 M-Factor (Acute aquatic toxicity): 10,000 Not Assigned 922-153-0 01-2119451097-39 Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066 13463-67-7 236-675-5 022-006-00-2 01-2119489379-17 Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066 13463-67-7 236-675-5 022-006-00-2 01-2119489379-17 Carc. 2; H351 2634-33-5 220-120-9 613-088-00-6 01-2120761540-60 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1 M-Factor (Acute aquatic toxicity): 1 specific concentration limit Skin Sens. 1; H317

For explanation of abbreviations see section 16.



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SECTION 4: First aid measures

4.1 Description of first aid measures General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment. If inhaled Move the victim to fresh air. : If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately. In case of skin contact Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use. Rinse immediately with plenty of water, also under the eyelids, In case of eye contact : for at least 15 minutes. Remove contact lenses. Immediate medical attention is required. If swallowed If swallowed, seek medical advice immediately and show this : container or label. Do NOT induce vomiting. 4.2 Most important symptoms and effects, both acute and delayed **Symptoms** Aspiration may cause pulmonary oedema and pneumonitis. : Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. 4.3 Indication of any immediate medical attention and special treatment needed ۱/or · · · ·

Treatment	: Do not induce vomiting: contains petroleum distillates and/or
	aromatic solvents.
	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	 Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires Alcohol-resistant foam
	or
	Water spray



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Unsuitable extinguishing media		:	Do not use a solid water stream as it may scatter and spread fire.	
5.2 Spec	ial hazards arising from	the	e substance or mi	xture
Specific hazards during firefighting		:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.	
5.3 Advi	ce for firefighters			
	cial protective equipment irefighters	:	Wear full protective apparatus.	ve clothing and self-contained breathing
Furt	her information	:	courses.	off from fire fighting to enter drains or water ainers exposed to fire with water spray.

SECTION 6: Accidental release measures

Personal precautions	:	Refer to protective measures listed in sections 7 and 8.
6.2 Environmental precautions Environmental precautions	:	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.
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6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Advice on safe handling :	No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.
	For personal protection see section 8.



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7.2 Condi	tions for safe storage,	inc	luding any incom	patibilities
	irements for storage and containers	:	tightly closed in a	e conditions required. Keep containers dry, cool and well-ventilated place. Keep out hildren. Keep away from food, drink and uffs.
	er information on ge stability	:		nemically stable for at least 2 years when inal unopened sales container at ambient
7.3 Speci	fic end use(s)			
Spec	ific use(s)	:	· ·	afe use of this product, please refer to the ns laid down on the product label.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
propane-1,2-diol	57-55-6	TWA (particles)	10 mg/m3	GB EH40
		TWA (Total vapour and particles)	150 ppm 474 mg/m3	GB EH40
lambda-cyhalothrin (ISO)	91465-08-6	TWA	0.04 mg/m3 (Skin)	Syngenta
hydrocarbons, C10-C13, aromatics, <1% naphthalene	Not Assigned	TWA	8 ppm 50 mg/m3	Supplier
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40
		TWA (Respirable dust)	4 mg/m3	GB EH40

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
propane-1,2-diol	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Consumers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	30 mg/m3
	Workers	Inhalation	Long-term local effects	10 mg/m3
hydrocarbons, C10-	Workers	Inhalation	Long-term systemic	151 mg/m3



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C13, aromatics, <1% naphthalene			effects	
	Workers	Dermal	Long-term systemic effects	12.5 mg/kg
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Dermal	Long-term systemic effects	7.5 mg/kg
	Consumers	Oral	Long-term systemic effects	7.5 mg/kg
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	Workers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Oral	Long-term systemic effects	700 mg/kg
1,2-benzisothiazol- 3(2H)-one	Workers	Inhalation	Long-term systemic effects	6.81 mg/m3
	Workers	Dermal	Long-term systemic effects	0.966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.2 mg/m3
	Consumers	Dermal	Long-term systemic effects	0.345 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
propane-1,2-diol	Fresh water	260 mg/l
	Marine water	26 mg/l
	Intermittent use/release	183 mg/l
	Sewage treatment plant	20000 mg/l
	Marine sediment	57.2 mg/kg
	Fresh water sediment	572 mg/kg
	Soil	50 mg/kg
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	Marine water	0.0184 mg/l
	Fresh water sediment	1000 mg/kg
	Fresh water	0.184 mg/l
	Marine sediment	100 mg/kg
	Soil	100 mg/kg
	Sewage treatment plant	100 mg/l
	Intermittent use/release	0.193 mg/l
1,2-benzisothiazol-3(2H)-one	Fresh water	0.00403 mg/l
	Marine water	0.000403 mg/l
	Sewage treatment plant	1.03 mg/l
	Fresh water sediment	0.0499 mg/kg
	Marine sediment	0.00499 mg/kg
	Freshwater - intermittent	0.0011 mg/l
	Marine water - intermittent	0.000110 mg/l



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		Soil	3 mg/kg				

8.2 Exposure controls

Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Personal protective equipment	
Eye protection : Hand protection	No special protective equipment required.
Material : Break through time : Glove thickness :	Nitrile rubber > 480 min 0.5 mm
Remarks :	Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
Skin and body protection :	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Remove and wash contaminated clothing before re-use. Wear as appropriate: Impervious clothing
Respiratory protection :	No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Protective measures :	The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice.



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Colour	:	liquid, opaque white
Odour Odour Threshold	:	No data available No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	100 °C
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	Method: Pensky-Martens closed cup does not flash
Auto-ignition temperature	:	420 °C
Decomposition temperature Decomposition temperature	:	No data available
рН	:	6.1 Concentration: 1 % w/v
Viscosity Viscosity, dynamic	:	50.8 mPa.s (20 °C)
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility Solubility in other solvents		Miscible No data available
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	No data available
Density	:	1.048 g/cm3 (20 °C)
Relative vapour density	:	No data available
Particle characteristics Particle size	:	No data available



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9.2 Other i	nformation			
Explos	sives	: N	Not explosive	
Oxidiz	ing properties	: 1	The substance o	r mixture is not classified as oxidizing.
Self-h	eating substances	: 1	The substance o	r mixture is not classified as self heating.
Evapo	pration rate	: N	No data available	9
Surfac	ce tension	: 5	57.6 mN/m, 1 %,	20.5 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition : No hazardous decomposition products are known. products

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Information on likely routes of : Ingestion Inhalation exposure Skin contact Eye contact Acute toxicity Product: : LD50 (Rat, female): 522 mg/kg Acute oral toxicity Remarks: Based on data from similar materials LC50 (Rat, male and female): > 2.07 mg/l Acute inhalation toxicity Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute



0	Revision Date: 14.05.2021		0S Number: 0054320466	This version replaces all previous versions	
			inhalation toxici	ty	
Acute	dermal toxicity	:	Assessment: Th toxicity	e and female): > 2,000 mg/kg ne substance or mixture has no acute dermal d on data from similar materials	
<u>Comp</u>	oonents:				
lambo	da-cyhalothrin (ISO):	:			
Acute	oral toxicity	:	LD50 (Rat, fema	ale): 56 mg/kg	
			LD50 (Rat, male	e): 79 mg/kg	
Acute	inhalation toxicity	:	LC50 (Rat. male	e and female): 0.06 mg/l	
	,	-	Exposure time:	4 h	
			Test atmospher	e: dust/mist	
Acute	dermal toxicity	:	LD50 (Rat, fema	ale): 696 mg/kg	
			LD50 (Rat, male): 632 mg/kg		
1,2-be	enzisothiazol-3(2H)-o	one:			
Acute	oral toxicity	:	LD50 (Rat, male	e): 670 mg/kg	
Acute	dermal toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Assessment: The substance or mixture has no acute derm toxicity		
Skin	corrosion/irritation				
Skin Produ Speci	<u>uct:</u>	:	Rabbit		
<u>Produ</u> Speci Resul	<mark>uct:</mark> es t	:	Mild skin irritatio		
<u>Produ</u> Speci	<mark>uct:</mark> es t	:	Mild skin irritation May cause tem	on oorary itching, tingling, burning or numbness alled paresthesia.	
<u>Produ</u> Speci Resul Rema	<mark>uct:</mark> es t	:	Mild skin irritation May cause tem	porary itching, tingling, burning or numbness	
Produ Speci Resul Rema	uct: es t urks ponents:	: :	Mild skin irritation May cause tem	porary itching, tingling, burning or numbness	
Produ Speci Resul Rema <u>Comp</u> Iambo Speci	<u>uct:</u> es t urks <u>ponents:</u> da-cyhalothrin (ISO): es	: :	Mild skin irritatio May cause temp exposed skin, c Rabbit	oorary itching, tingling, burning or numbness alled paresthesia.	
Produ Speci Resul Rema <u>Comp</u> Iambo Speci Resul	<u>uct:</u> es t urks ponents: da-cyhalothrin (ISO): es t		Mild skin irritatio May cause temp exposed skin, c Rabbit No skin irritatior	borary itching, tingling, burning or numbness alled paresthesia.	
Produ Speci Resul Rema <u>Comp</u> Iambo Speci	<u>uct:</u> es t urks ponents: da-cyhalothrin (ISO): es t		Mild skin irritation May cause temperature exposed skin, c Rabbit No skin irritation May cause temp	oorary itching, tingling, burning or numbness alled paresthesia.	
Produ Speci Resul Rema <u>Comp</u> Iambo Speci Resul Rema	<u>uct:</u> es t urks ponents: da-cyhalothrin (ISO) : es t urks	:	Mild skin irritatio May cause tempexposed skin, c Rabbit No skin irritation May cause tempexposed skin, c	borary itching, tingling, burning or numbness alled paresthesia. N borary itching, tingling, burning or numbness alled paresthesia.	
Produ Speci Resul Rema <u>Comp</u> Iambo Speci Resul Rema	uct: es t urks conents: da-cyhalothrin (ISO): es t urks ocarbons, C10-C13, a	:	Mild skin irritatio May cause temperature exposed skin, c Rabbit No skin irritation May cause temperature exposed skin, c	borary itching, tingling, burning or numbness alled paresthesia. N borary itching, tingling, burning or numbness alled paresthesia.	
Produ Speci Resul Rema Iambo Speci Resul Rema hydro Resul	uct: es t urks conents: da-cyhalothrin (ISO): es t urks ocarbons, C10-C13, a	aroma	Mild skin irritatio May cause temperature exposed skin, c Rabbit No skin irritation May cause temperature exposed skin, c	porary itching, tingling, burning or numbness alled paresthesia. N porary itching, tingling, burning or numbness alled paresthesia.	



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Result	:	:	Mild skin irritatio	n	
Seriou	us eye damage/eye	irritati	on		
<u>Produ</u>	ict:				
Specie		:	Rabbit		
Result		:	No eye irritation		
<u>Comp</u>	onents:				
lambo	la-cyhalothrin (ISO)	:			
Specie		:	Rabbit		
Result		:	No eye irritation		
1,2-be	enzisothiazol-3(2H)-	one:			
Specie		:	Rabbit		
Result		:	Risk of serious c	lamage to eyes.	
Respi	ratory or skin sensi	itisatio	n		
<u>Produ</u>	ict:				
Specie		:	Humans		
Result		:	Probability or ev	idence of skin sensitisation in humans	
Test T	уре	:	Buehler Test		
Specie		:	Guinea pig		
Result		:	Did not cause se	ensitisation on laboratory animals.	
<u>Comp</u>	onents:				
lambo	la-cyhalothrin (ISO)):			
Test T		:	Maximisation Te	st	
Specie Result		:	Guinea pig		
Result			Does not cause	skin sensitisation.	
Test T		:	Local lymph nod	e assay (LLNA)	
Specie		:	Mouse		
Result		:	Does not cause	skin sensitisation.	
	enzisothiazol-3(2H)-	one:			
Result	:	:	Probability or ev	idence of skin sensitisation in humans	
Germ	cell mutagenicity				
<u>Comp</u>	onents:				
lambo	la-cyhalothrin (ISO)):			
	cell mutagenicity-		Animal testing di	d not show any mutagenic effects.	
	sment		5		



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Gerr	benzisothiazol-3(2H)-on m cell mutagenicity- essment	ie: :	Weight of evide cell mutagen.	ence does not support classification as a germ
Card	cinogenicity			
Con	nponents:			
Carc	bda-cyhalothrin (ISO): cinogenicity - essment	:	Weight of evide carcinogen	ence does not support classification as a
	nium dioxide; [in powde neter ≤ 10 μm]:	er fo	rm containing 1	% or more of particles with aerodynamic
Carc	cinogenicity - essment	:	Weight of evide carcinogen	ence does not support classification as a
Rep	roductive toxicity			
Con	nponents:			
Rep	b da-cyhalothrin (ISO): roductive toxicity - essment	:	Weight of evide reproductive to	ence does not support classification for xicity
STO	T - single exposure			
<u>Con</u>	<u>nponents:</u>			
	bda-cyhalothrin (ISO): essment	:		or mixture is not classified as specific target single exposure.
STO	T - repeated exposure			
<u>Con</u>	<u>iponents:</u>			
	bda-cyhalothrin (ISO): essment	:		or mixture is not classified as specific target repeated exposure.
Asp	iration toxicity			
Con	ponents:			

hydrocarbons, C10-C13, aromatics, <1% naphthalene:

May be fatal if swallowed and enters airways.



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11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:		
lambda-cyhalothrin (ISO):		
Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 0.000078 mg/l Exposure time: 96 h
		LC50 (Ictalurus punctatus (channel catfish)): 0.00016 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.00036 mg/l Exposure time: 48 h
		LC50 (Americamysis): 0.000007 mg/l Exposure time: 48 h
		EC50 (Hyalella azteca (Amphipod)): 0.000002 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 0.31 mg/l Exposure time: 96 h
M-Factor (Acute aquatic toxicity)	:	10,000
Toxicity to microorganisms	:	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 0.000031 mg/l Exposure time: 300 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.000002 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
		NOEC: 0.00022 µg/l Exposure time: 28 d



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			Species: Americamysis
M-Fac toxicit	ctor (Chronic aquatic y)	:	10,000
hydro	ocarbons, C10-C13, aro	ma	tics, <1% naphthalene:
Toxici	ty to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): 3.6 mg/l Exposure time: 96 h Remarks: Information given is based on data obtained from similar substances.
	ty to daphnia and other	:	
aquat	aquatic invertebrates		Exposure time: 48 h Remarks: Information given is based on data obtained from similar substances.
Toxici plants	ty to algae/aquatic	:	EL50 (Raphidocelis subcapitata (freshwater green alga)): 7. mg/l End point: Growth rate
			Exposure time: 72 h Remarks: Information given is based on data obtained from similar substances.
			NOELR (Raphidocelis subcapitata (freshwater green alga)): 0.22 mg/l End point: Growth rate Exposure time: 72 h Remarka: Information given is based on data obtained from
			Remarks: Information given is based on data obtained from similar substances.
Ecoto	oxicology Assessment		
	nic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.
1.2-be	enzisothiazol-3(2H)-on	e:	
	ty to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 2.18 mg/l Exposure time: 96 h
	ty to daphnia and other ic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.94 mg/l Exposure time: 48 h
Toxici plants	ty to algae/aquatic	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.15 mg/l Exposure time: 72 h
			EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.04 mg/l End point: Growth rate Exposure time: 72 h
M-Fac toxicit	ctor (Acute aquatic y)	:	1
Taula	ty to fish (Chronic	:	NOEC: 0.3 mg/l



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toxicity	()		Exposure time: 28 Species: Oncorhy	3 d /nchus mykiss (rainbow trout)
aquatio	y to daphnia and other c invertebrates ic toxicity)	:	NOEC: 1.7 mg/l Exposure time: 2 Species: Daphnia	
12.2 Persis	stence and degradabil	ity		
Comp	onents:			
	a-cyhalothrin (ISO): gradability	:	Result: Not readil	y biodegradable.
Stabilit	y in water	:	Degradation half life (DT50): 7 d Remarks: Product is not persistent.	
hydro	carbons, C10-C13, arc	oma	itics, <1% naphtha	alene:
Biodeg	gradability	:	Result: Readily b	odegradable.
	nzisothiazol-3(2H)-on o gradability	e: :	Result: rapidly de	gradable
12.3 Bioac	cumulative potential			
<u>Comp</u>	onents:			
	a-cyhalothrin (ISO): sumulation	:	Remarks: Bioacc	umulates
	nzisothiazol-3(2H)-one cumulation	e: :	Remarks: Bioacc	umulation is unlikely.
12.4 Mobili	ty in soil			
<u>Comp</u>	onents:			
Distrib enviror	a-cyhalothrin (ISO): ution among nmental compartments y in soil	:		
12.5 Resul	ts of PBT and vPvB as	sse		
<u>Produ</u>	<u>ct:</u>			
Assess	sment	:	to be either persis	ixture contains no components considered stent, bioaccumulative and toxic (PBT), or ad very bioaccumulative (vPvB) at levels of



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<u>Com</u>	ponents:			
lamb	da-cyhalothrin (ISO):			
	ssment	k C	pioaccumulatin	e is not considered to be persistent, ig and toxic (PBT) This substance is not be very persistent and very bioaccumulating
1,2-b	enzisothiazol-3(2H)-o	ne:		
Asse	ssment	k C	pioaccumulatin	e is not considered to be persistent, ig and toxic (PBT) This substance is not be very persistent and very bioaccumulating
2.6 Ende	ocrine disrupting pro	oerties		
Prod	luct:			
Asse	ssment	c t (considered to h o REACH Artic	/mixture does not contain components have endocrine disrupting properties according cle 57(f) or Commission Delegated regulation 0 or Commission Regulation (EU) 2018/605 at or higher.
	er adverse effects ata available			
SECTIO	N 13: Disposal cons	iderat	ions	
3.1 Was	te treatment methods			
Prod		: [c [\ i	chemical or us Do not dispose Where possible ncineration.	e of waste into sewer. e recycling is preferred to disposal or ot practicable, dispose of in compliance with
Cont	aminated packaging	- E ł	nandling site fo	
Wast	te Code		uncleaned pac 15 01 10, pack by hazardous s	aging containing residues of or contaminated



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SECTION 14: Transport information

14.1 UN number or ID number

	ADN	:	UN 3082
	ADR	:	UN 3082
	RID	:	UN 3082
	IMDG	:	UN 3082
	ΙΑΤΑ	:	UN 3082
14.2	UN proper shipping name		
	ADN	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)
	ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)
	RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)
	IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN)
	ΙΑΤΑ	:	Environmentally hazardous substance, liquid, n.o.s. (LAMBDA-CYHALOTHRIN)
14.3	Transport hazard class(es)		
	ADN	:	9
	ADR	:	9
	RID	:	9
	IMDG	:	9
	ΙΑΤΑ	:	9
14.4	Packing group		
	ADN Packing group Classification Code Hazard Identification Number Labels	: : : :	III M6 90 9
	ADR Packing group Classification Code Hazard Identification Number Labels Tunnel restriction code	: : : : : :	III M6 90 9 (-)



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Classi	ng group fication Code d Identification Number	: III : M6 : 90 : 9	
IMDG Packir Labels EmS (: III : 9 : F-A, S-F	
Packir aircrat Packir	ng instruction (LQ) ng group	: 964 : Y964 : III : Miscellaneou	s
Packiı (passe Packiı	(Passenger) ng instruction enger aircraft) ng instruction (LQ) ng group	: 964 : Y964 : III : Miscellaneou	S
4.5 Envir	onmental hazards		
ADN Enviro	onmentally hazardous	: yes	
ADR Enviro	nmentally hazardous	: yes	
RID Enviro	onmentally hazardous	: yes	
IMDG Marine	e pollutant	: yes	
	(Passenger)	: yes	
	(Cargo) Inmentally hazardous		

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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



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the m		e manufacture, placing o in dangerous substances nnex XVII)		Conditions of restriction for the following entries should be considered: Number on list 3
	CH - Candidate List of ern for Authorisation (<i>i</i>	Substances of Very High Article 59).	:	Not applicable
REAC		s subject to authorisation	:	Not applicable
Regu	,	009 on substances that	:	Not applicable
Regu		on persistent organic	:	Not applicable
Regu Parlia	lation (EC) No 649/20	concerning the export an	: nd	Not applicable
Seve	so III: Directive 2012/1			t and of the Council on the control of

		Quantity 1	Quantity 2
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Use plant protection products safely. Always read the label and product information before use. Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information

Full text of H-Statements

H304 H311 H315 H317 H318		Toxic if swallowed. Harmful if swallowed. May be fatal if swallowed and enters airways. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Fatal if inhaled. Suspected of causing cancer if inhaled. Very toxic to aquatic life. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking.		
Full text of other abbreviations				
Acute Tox. Aquatic Acute Aquatic Chronic	: : :	Acute toxicity Short-term (acute) aquatic hazard Long-term (chronic) aquatic hazard		



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Asp. Carc.		: Aspiration haza : Carcinogenicity	rd			
Eye Dam. Skin Irrit.		: Serious eye damage				
		: Skin irritation				
Skin	Sens.	: Skin sensitisatio	n			
GB E	H40	: UK. EH40 WEL	- Workplace Exposure Limits			
GB E	H40 / TWA	: Long-term expo	sure limit (8-hour TWA reference period)			

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization: ISHL - Industrial Safety and Health Law (Japan): ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations: vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the m	ixture:	Classification procedure:
Acute Tox. 4	H302	Based on product data or assessment
Skin Sens. 1	H317	Based on product data or assessment
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.



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