

Ceftiofur Formulation

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Version	Revision Date:	SDS Number:	Date of last issue: 04.04.2023
4.5	30.09.2023	7686860-00009	Date of first issue: 15.12.2020

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

1.1	Product identifier		
	Trade name	:	Ceftiofur Formulation
1.2	Relevant identified uses of the	ne s	ubstance or mixture and uses advised against
	Use of the Sub- stance/Mixture	:	Veterinary product
	Recommended restrictions on use	:	Not applicable
1.3	Details of the supplier of the	saf	ety data sheet
	Company	:	MSD
			Kilsheelan
			Clonmel Tipperary, IE
	Telephone		353-51-601000
		•	
	E mail address of parson		
	E-mail address of person responsible for the SDS	:	EHSDATASTEWARD@msd.com

1.4 Emergency telephone number

1-908-423-6000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

2

Respiratory sensitisation, Category 1

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

Hazard statements

: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Preca	utionary statements	keep comfortab	IF INHALED: Remove person to fresh air and ble for breathing. If experiencing respiratory symptoms: Call a FER/ doctor.

Hazardous components which must be listed on the label:

Ceftiofur

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Components			-
Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		· · · ·
	Registration number		
Cofficient		Boon Sono 1: H224	>= 1 - < 10
Ceftiofur	103980-44-5	Resp. Sens. 1; H334	>= 1 - < 10
		STOT RE 2; H373	
Benzyl alcohol	100-51-6	Acute Tox. 4; H302	>= 1 - < 10
	202-859-9	Acute Tox. 4; H332	
	603-057-00-5	Eye Irrit. 2; H319	
		,	
		Acute toxicity esti-	
		mate	
		Acute oral toxicity:	
		1,620 mg/kg	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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		vice immediately. When symptoms persist or in all cases advice.	s of doubt seek medical
Prote	ction of first-aiders	: First Aid responders should pay attent and use the recommended personal p when the potential for exposure exists	rotective equipment
lf inha	aled	: If inhaled, remove to fresh air. If not breathing, give artificial respiration If breathing is difficult, give oxygen. Get medical attention.	on.
In case of skin contact		: Wash with water and soap as a preca Get medical attention if symptoms occ	
In case of eye contact		: Flush eyes with water as a precaution Get medical attention if irritation devel	
lf swa	llowed	: If swallowed, DO NOT induce vomiting Get medical attention if symptoms occ Rinse mouth thoroughly with water.	
4.2 Most i	mportant symptoms	and effects, both acute and delayed	
Risks		: May cause allergy or asthma sympton ties if inhaled.	ns or breathing difficul-
		Excessive exposure may aggravate particular other respiratory disorders (e.g. emphatricular tive airways dysfunction syndrome).	
4.3 Indica	tion of any immedia	e medical attention and special treatment	needed
T	ment	: Treat symptomatically and supportivel	V.

5.1 Extinguishing media

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire- : Exposure to combustion products may be a hazard to health. fighting



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	Hazaro ucts	lous combustion prod-	:	Carbon oxides	
5.3	5.3 Advice for firefighters				
	Special protective equipment for firefighters		•		e, wear self-contained breathing apparatus. ective equipment.
	Specific extinguishing meth- ods		:	cumstances and t Use water spray t	measures that are appropriate to local cir- he surrounding environment. o cool unopened containers. ged containers from fire area if it is safe to do

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).
6.2 Environmental precautions		
Environmental precautions	:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up :	Soak up with inert absorbent material. For large spills, provide dyking or other appropriate contain- ment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor- bent. Local or national regulations may apply to releases and dis- posal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter- mine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.
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6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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SECTION 7: Handling and storage

7.1 Precautions for safe handling	g	
Technical measures	:	See Engineering measures under EXPOSURE
Local/Total ventilation Advice on safe handling	::	CONTROLS/PERSONAL PROTECTION section. Use only with adequate ventilation. Do not breathe mist or vapours. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as- sessment Keep container tightly closed. Already sensitised individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respira- tory irritants or sensitisers. Take care to prevent spills, waste and minimize release to the environment.
Hygiene measures	:	If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contami- nated clothing before re-use. The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.
7.2 Conditions for safe storage, i	inc	luding any incompatibilities
Requirements for storage areas and containers	:	Keep in properly labelled containers. Keep tightly closed. Store in accordance with the particular national regulations.
Advice on common storage	:	Do not store with the following product types: Strong oxidizing agents Gases
7.3 Specific end use(s) Specific use(s)	:	No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ceftiofur	103980-44- 5	TWA	100 mcg/m3 (OEB 2)	Internal



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

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		Further	information: RS	EN	
	Silicon, amorpho	ous 112945			IE OEL
		5	(TWA) (Respira- (Silica)	

5	(TWA) (Respira- ble dust)	(Silica)	
	OELV - 8 hrs (TWA) (inhalable dust)	6 mg/m3 (Silica)	IE OEL

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

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
Benzyl alcohol	Workers	Inhalation	Long-term systemic effects	22 mg/m3
	Workers	Inhalation	Acute systemic ef- fects	110 mg/m3
	Workers	Skin contact	Long-term systemic effects	8 mg/kg bw/day
	Workers	Skin contact	Acute systemic ef- fects	40 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	5.4 mg/m3
	Consumers	Inhalation	Acute systemic ef- fects	27 mg/m3
	Consumers	Skin contact	Long-term systemic effects	4 mg/kg bw/day
	Consumers	Skin contact	Acute systemic ef- fects	20 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	4 mg/kg bw/day
	Consumers	Ingestion	Acute systemic ef- fects	20 mg/kg bw/day
Glycerides, mixed decanoyl and oc- tanoyl	Workers	Inhalation	Long-term systemic effects	177.79 mg/m3
	Workers	Skin contact	Long-term systemic effects	25.21 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	43.84 mg/m3
	Consumers	Skin contact	Long-term systemic effects	12.61 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	12.61 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
Benzyl alcohol	Fresh water	1 mg/l
	Marine water	0.1 mg/l
	Intermittent use/release	2.3 mg/l
	Sewage treatment plant	39 mg/l
	Fresh water sediment	5.27 mg/kg
	Marine sediment	0.527 mg/kg

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		Soil	0.456 mg/k

	Soil	0.456 mg/kg
Glycerides, mixed decanoyl and	Oral (Secondary Poisoning)	0.03 mg/kg food
octanoyl		

8.2 Exposure controls

Engineering measures

Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Laboratory operations do not require special containment.

Personal protective equipment

Eye/face protection	:	Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.
Hand protection Material	:	Chemical-resistant gloves
Skin and body protection Respiratory protection	:	Work uniform or laboratory coat. If adequate local exhaust ventilation is not available or expo- sure assessment demonstrates exposures outside the rec- ommended guidelines, use respiratory protection. Equipment should conform to I.S. EN 14387
Filter type	:	Combined particulates and organic vapour type (A-P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	suspension
Colour	:	white to off-white, cream
Odour	:	No data available
Odour Threshold	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available

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	Lower explosion limit / Lower flammability limit		:	No data available	9
	Flash p	point	:	No data available	9
	Auto-ig	nition temperature	:	No data available	9
	Decom	position temperature	:	No data available	9
	рН		:	No data available	9
	Viscosi Visc	ity cosity, kinematic	:	No data available	9
	Solubil Wat	ity(ies) ter solubility	:	No data available	9
	Partitio octano	n coefficient: n- I/water	:	Not applicable	
	Vapou	r pressure	:	No data available	9
	Relativ	e density	:	No data available	9
	Density	/	:	0.850 - 1.050 g/c No data available	
	Relativ	e vapour density	:	No data available	9
		e characteristics ticle size	:	Not applicable	
9.2	9.2 Other information				
	Explos	ives	-	Not explosive	
	Oxidizi	ng properties	:	The substance o	r mixture is not classified as oxidizing.
	Evapor	ration rate	:	No data available	9
	Molecu	ılar weight	:	No data available	9

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

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10.3 Possil	pility of hazardous rea	ctic	ons	
Hazaro	lous reactions	:	Can react with st	rong oxidizing agents.
10.4 Condi	tions to avoid			
Conditi	ons to avoid	:	None known.	
0.5 Incom	patible materials			
Materia	als to avoid	:	Oxidizing agents	
	dous decomposition p			
No haz	ardous decomposition	proc	ducts are known.	
SECTION	11: Toxicological in	for	mation	
Informa exposu	ation on likely routes of Ire	:	Inhalation Skin contact Ingestion Eye contact	
	toxicity			
	ssified based on availa	bie	iniormation.	
Produce Acute of	oral toxicity	:	Acute toxicity estin Method: Calculation	mate: > 2,000 mg/kg on method
Acute i	nhalation toxicity	:	Acute toxicity estin Exposure time: 4 Test atmosphere: Method: Calculation	h dust/mist
Comp	onents:			
Ceftio	ur:			
Acute	oral toxicity	:	LD50 (Rat): > 7,76	60 mg/kg
Benzy	l alcohol:			
Acute	oral toxicity	:	LD50 (Rat): 1,620	mg/kg

Skin corrosion/irritation

Not classified based on available information.

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Components:

Benzyl alcohol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Benzyl alcohol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irritation to eyes, reversing within 21 days

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Components:

Ceftiofur:

Exposure routes	:	Inhalation
Result	:	Sensitiser
Remarks	:	May cause sensitisation by inhalation.

Benzyl alcohol:

Test Type	:	Maximisation Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

Germ cell mutagenicity

Not classified based on available information.

Components:

Ceftiofur:	
Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Result: negative
	Test Type: In vitro mammalian cell gene mutation test Result: negative
	Test Type: unscheduled DNA synthesis assay

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ersion 5	Revision Date: 30.09.2023	-	S Number: 36860-00009	Date of last issue: 04.04.2023 Date of first issue: 15.12.2020
			Result: negative	
Geno	toxicity in vivo	:	Test Type: Micro Species: Rat Application Rou Result: negative	te: Intraperitoneal
Benz	yl alcohol:			
Geno	toxicity in vitro	:	Test Type: Bact Result: negative	erial reverse mutation assay (AMES)
Geno	toxicity in vivo	:	cytogenetic assa Species: Mouse	te: Intraperitoneal injection
	i nogenicity lassified based on ava	ailahle i	nformation	
	ponents:		mormation.	
	yl alcohol:			
Speci Applio	ies cation Route sure time od	:	Mouse Ingestion 103 weeks OECD Test Guid negative	deline 451
-	oductive toxicity lassified based on ava	ailable i	nformation.	
<u>Com</u>	ponents:			
Ceftie	ofur:			
Effect	ts on fertility	:	Test Type: Ferti Application Rou Fertility: NOAEL Result: No adve	te: Oral .: 1,000 mg/kg body weight
Effect ment	ts on foetal develop-	:	Test Type: Deve Application Rou Developmental Result: No adve	te: Oral Toxicity: NOAEL: 1,000 mg/kg body weight
Benz	yl alcohol:			
	ts on fertility	:	Species: Rat Application Rou Result: negative	

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Effects on foetal develop- Test Type: Embryo-foetal development Species: Mouse Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure Not classified based on available information. STOT - repeated exposure Not classified based on available information. Components: Dettiofur: Exposure routes : Oral Assessment : May cause damage to organs through prolonged or represexposure. Repeated dose toxicity Demponents: Species : Rat NOAEL :: 30 mg/kg Application Route : 0ral Exposure time :: Gastrointestinal tract Symptoms :: Gastrointestinal disturbance Remarks :: 30 mg/kg Application Route : 20 od Target Organs :: Blood, Central nervous system Remarks :: May cause damage to organs. Species :: 00 di Target Organs :: Blood, Central nervous system Remarks :: May cause damage to organs. <th>ersion .5</th> <th>Revision Date: 30.09.2023</th> <th>-</th> <th>S Number: 36860-00009</th> <th>Date of last issue: 04.04.2023 Date of first issue: 15.12.2020</th>	ersion .5	Revision Date: 30.09.2023	-	S Number: 36860-00009	Date of last issue: 04.04.2023 Date of first issue: 15.12.2020
Not classified based on available information. STOT - repeated exposure Not classified based on available information. Certiofur: Exposure routes : Oral Assessment : May cause damage to organs through prolonged or repression Repeated dose toxicity Components: Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : Blood, Central nervous system Remarks : Blood, Central nervous system Remarks : May cause damage to organs.			:	Species: Mouse Application Rou	e ute: Ingestion
Not classified based on available information. Components: Ceftiofur: Exposure routes : Oral Assessment : May cause damage to organs through prolonged or represence. Repeated dose toxicity Components: Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal tract Symptoms : Gastrointestinal disturbance Remarks : May cause damage to organs. Species : Bog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Species : May cause damage to organs.			ilable i	nformation.	
Components: Ceftiofur: Exposure routes : Oral Assessment : May cause damage to organs through prolonged or representation of the exposure. Repeated dose toxicity Components: Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal tract Symptoms : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Benzyl alcohol: : May cause damage to organs. Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May c	STO	F - repeated exposure	•		
Ceftiofur: Exposure routes : Oral Assessment : May cause damage to organs through prolonged or represensation or exposure. Repeated dose toxicity Components: Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : May cause damage to organs. Species : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Benzyl alcohol: : Species : Rat NOAEL : 1.072 mg/l Application Route : 1.072 mg/l Application Route : inhalation (dust/mist/fume)	Not c	lassified based on ava	ilable i	nformation.	
Exposure routes : Oral Assessment : May cause damage to organs through prolonged or representation or exposure. Repeated dose toxicity Components: Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal tract Symptoms : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : May cause damage to organs. Species : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Benzyl alcohol: : Species : Rat NOAEL : 1.072 mg/l Application Route : inhalation (dust/mist/fume)	<u>Com</u>	ponents:			
Assessment : May cause damage to organs through prolonged or representation or exposure. Repeated dose toxicity Components: Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route <td: 0ral<="" td=""> Exposure time : 90 d Target Organs : Gastrointestinal tract Symptoms : Gastrointestinal disturbance Remarks : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal disturbance Remarks : May cause damage to organs. Species : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Enzyl alcohol: : Species : Rat NOAEL : 1.072 mg/l Application Route : inhalation (dust/mist/fume)</td:>	Ceftie	ofur:			
Components: Ceftiofur: Species Rat NOAEL 30 mg/kg Application Route Oral Exposure time 90 d Target Organs Gastrointestinal tract Symptoms Gastrointestinal disturbance Remarks May cause damage to organs. Species Dog NOAEL 30 mg/kg Application Route Oral Exposure time 90 d Target Organs Blood, Central nervous system Remarks Blood, Central nervous system Remarks May cause damage to organs. Benzyl alcohol: Species Species Rat NOAEL 1.072 mg/l Application Route inhalation (dust/mist/fume)				May cause dan	nage to organs through prolonged or repeated
Ceftiofur: Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal tract Symptoms : Gastrointestinal disturbance Remarks : May cause damage to organs. Species : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Blood, Central nervous system Remarks Remarks : May cause damage to organs.	Repe	ated dose toxicity			
Species : Rat NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Gastrointestinal tract Symptoms : Gastrointestinal disturbance Remarks : May cause damage to organs. Species : Dog NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Benzyl alcohol: : Species : Rat NOAEL : 1.072 mg/l Application Route : inhalation (dust/mist/fume)	Com	ponents:			
NOAEL: 30 mg/kgApplication Route: OralExposure time: 90 dTarget Organs: Gastrointestinal tractSymptoms: Gastrointestinal disturbanceRemarks: May cause damage to organs.Species: DogNOAEL: 30 mg/kgApplication Route: OralExposure time: 90 dTarget Organs: Blood, Central nervous systemRemarks: May cause damage to organs.	Ceftie	ofur:			
NOAEL : 30 mg/kg Application Route : Oral Exposure time : 90 d Target Organs : Blood, Central nervous system Remarks : May cause damage to organs. Benzyl alcohol: Species : Rat NOAEL : 1.072 mg/l Application Route : inhalation (dust/mist/fume)	NOAI Applic Expose Targe Symp	EL cation Route sure time et Organs otoms		30 mg/kg Oral 90 d Gastrointestina Gastrointestina	I disturbance
Species:RatNOAEL:1.072 mg/lApplication Route:inhalation (dust/mist/fume)	NOAI Applic Expose Targe	EL cation Route sure time et Organs		30 mg/kg Oral 90 d Blood, Central	
Species:RatNOAEL:1.072 mg/lApplication Route:inhalation (dust/mist/fume)	Benz	vl alcohol:			
Exposure time: 28 DaysMethod: OECD Test Guideline 412	Speci NOAI Applic Expos	ies EL cation Route sure time	:	1.072 mg/l inhalation (dust 28 Days	

Aspiration toxicity

Not classified based on available information.



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11.2 Infor	11.2 Information on other hazards						
Endo	crine disrupting pro	perties					
Prod	uct:						
Asse	ssment	ered to hav REACH Ar (EU) 2017/	nce/mixture does not contain components consid- e endocrine disrupting properties according to icle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/605 at 1% or higher.				
Expe	rience with human e	xposure					
Com	ponents:						
Ceftie	ofur:						
Gene	ral Information	: Repeated of ceptible pe	contact may cause allergic reactions in very sus-				
Inhala	ation	: Symptoms	Nausea, Vomiting, Abdominal pain, vaginitis, Dizziness, dry mouth, Fatigue, constipation, colitis				
SECTION	SECTION 12: Ecological information						
12.1 Toxic	citv						
	ponents:						
	yl alcohol: ity to fish	: LC50 (Pime	ephales promelas (fathead minnow)): 460 mg/l				

loxicity to fish	•	LC50 (Pimephales promelas (fathead minnow)): 460 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 230 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 770 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		NOEC (Pseudokirchneriella subcapitata (green algae)): 310 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC: 51 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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12.2 F	Persis	tence and degradabi	lity			
<u>c</u>	Compo	onents:				
	-	alcohol: radability	:	: Result: Readily biodegradable. Biodegradation: 92 - 96 % Exposure time: 14 d		
12.3 E	Bioaco	cumulative potential				
<u>c</u>	Compo	onents:				
F	Partitio	alcohol: n coefficient: n- /water	:	log Pow: 1.05		
		t y in soil a available				
12.5 F	Result	s of PBT and vPvB a	sse	ssment		
	Produc Assess		:	: 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.		
12.6 E	Endoc	rine disrupting prope	ertie	es		
	Produc Assess		:	ered to have endo REACH Article 57	ixture does not contain components consid- ocrine disrupting properties according to 7(f) or Commission Delegated regulation or Commission Regulation (EU) 2018/605 at higher.	
		adverse effects a available				
SECTION 13: Disposal considerations						
13.1 \	Waste	treatment methods				
F	Produc	t	:	According to the l are not product sp Waste codes sho	ordance with local regulations. European Waste Catalogue, Waste Codes becific, but application specific. uld be assigned by the user, preferably in	



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SECTION 14: Transport information

14.1 UN number or ID number

	ADN	:	Not regulated as a dangerous good			
	ADR	:	Not regulated as a dangerous good			
	RID	:	Not regulated as a dangerous good			
	IMDG	:	Not regulated as a dangerous good			
	ΙΑΤΑ	:	Not regulated as a dangerous good			
14.2	2 UN proper shipping name					
	ADN	:	Not regulated as a dangerous good			
	ADR	:	Not regulated as a dangerous good			
	RID	:	Not regulated as a dangerous good			
	IMDG	:	Not regulated as a dangerous good			
	ΙΑΤΑ	:	Not regulated as a dangerous good			
14.3 Transport hazard class(es)						
	ADN	:	Not regulated as a dangerous good			
	ADR	:	Not regulated as a dangerous good			
	RID	:	Not regulated as a dangerous good			
	IMDG	:	Not regulated as a dangerous good			
	ΙΑΤΑ	:	Not regulated as a dangerous good			
14.4	4 Packing group					
	ADN	:	Not regulated as a dangerous good			
	ADR	:	Not regulated as a dangerous good			
	RID	:	Not regulated as a dangerous good			
	IMDG	:	Not regulated as a dangerous good			
	IATA (Cargo)	:	Not regulated as a dangerous good			
	IATA (Passenger)	:	Not regulated as a dangerous good			
14.	5 Environmental hazards					
	Not regulated as a dangerous good					

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.



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SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the fol- lowing entries should be considered: Number on list 3
		Substance(s) or mixture(s) are listed here according to their appearance in the regulation, irrespective of their use/purpose or the conditions of the restriction. Please refer to the condi- tions in corresponding Regulation to determine whether an entry is appli- cable to the placing on the market or not.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollu- tants (recast)	:	Not applicable
Regulation (EC) No 649/2012 of the European Parlia- ment and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

DSL	:	not determined
AICS	:	not determined
IECSC	:	not determined

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Full text of H-Statements

H302 H319 H332	:	Harmful if swallowed. Causes serious eye irritation. Harmful if inhaled.	
H334	:	May cause allergy or asthma symptoms or breathing difficul- ties if inhaled.	
H373	:	May cause damage to organs through prolonged or repeated exposure if swallowed.	
Full text of other abbreviations			
Full text of other appreviation	ns		
Acute Tox.		Acute toxicity	
		Acute toxicity Eye irritation	
Acute Tox.			
Acute Tox. Eye Irrit.	:	Eye irritation	

IE OEL / OELV - 8 hrs (TWA) : Occupational exposure limit value (8-hour reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - 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; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative



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	ner information		
	ces of key data used to bile the Safety Data bt		hical data, data from raw material SDSs, OECD I search results and European Chemicals Agen- a.europa.eu/
Clas	sification of the mixt	ure:	Classification procedure:
Resp	o. Sens. 1	H334	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

IE / EN