

Vers 1.18		Revision Date: 06.04.2024		DS Number: 02632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
SEC	TION	1: Identification of	the	substance/mixt	ure and of the company/undertaking
	Product Trade i	t identifier name	:	Recombinant Boy	vine Somatotropin Formulation
	Use of	nt identified uses of t the Sub- /Mixture		substance or mixt Veterinary produc	ure and uses advised against ct
	Recom on use	mended restrictions	:	Not applicable	
1.3 E	Details	of the supplier of the	e sa	fety data sheet	
	Compa	ny	:	MSD 20 Spartan Road 1619 Spartan, Se	
	Teleph	one	:	+27119239300	
		address of person	:	EHSDATASTEW	ARD@msd.com

1.4 Emergency telephone number

responsible for the SDS

+1-908-423-6000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

,	•
Eye irritation, Category 2	H319: Causes serious eye irritation.
Long-term (chronic) aquatic hazard, Cat-	H412: Harmful to aquatic life with long lasting ef-
egory 3	fects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H319 Causes serious eye irritation.H412 Harmful to aquatic life with long lasting effects.



Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
1.18	06.04.2024	402632-00019	Date of first issue: 11.12.2015
Preca	utionary statements	P273 Avoid rele P280 Wear eye Response:	n thoroughly after handling. ase to the environment. protection/ face protection. eye irritation persists: Get medical advice/

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Recombinant Bovine Somatotropin	Not Assigned		>= 20 - < 30
Benzyl alcohol	100-51-6 202-859-9 603-057-00-5	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319	>= 10 - < 20
Benzyl benzoate	120-51-4 204-402-9 607-085-00-9	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Gene	eral advice	:	In the case of accident or if you feel unwell, seek medical ad- vice immediately. When symptoms persist or in all cases of doubt seek medical advice.
Prote	ection of first-aiders	:	First Aid responders should pay attention to self-protection,



Version 1.18	Revision Date: 06.04.2024		OS Number: 2632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
				mmended personal protective equipment al for exposure exists (see section 8).
lf ii	nhaled	:	If inhaled, remove Get medical atter	e to fresh air. ation if symptoms occur.
In case of skin contact		:		and soap as a precaution. ation if symptoms occur.
In case of eye contact		:	for at least 15 min	ove contact lens, if worn.
If swallowed		:	Get medical atter	NOT induce vomiting. ntion if symptoms occur. oughly with water.
4.2 Mos	st important symptoms a	nd e	effects, both acute	e and delayed
	sks	:	Causes serious e	-
1 2 Indi	action of any immediate	mo	diasl attention and	d special treatment needed
	eatment	ine :		cally and supportively.
SECTI	ON 5: Firefighting meas	sur	es	
5 1 Evt	inguishing media			
	itable extinguishing media	:	Water spray Alcohol-resistant Carbon dioxide ((Dry chemical	
	suitable extinguishing edia	:	None known.	
5 2 Sne	cial hazards arising from	h tha	substance or mi	xturo.
Sp	ecific hazards during fire- hting	:		bustion products may be a hazard to health.
Ha uct	zardous combustion prod-	:	Carbon oxides	
5.3 Adv	vice for firefighters			
Sp	ecial protective equipment firefighters	:		e, wear self-contained breathing apparatus. tective equipment.
Sp od:	ecific extinguishing meth- s	:	cumstances and	g measures that are appropriate to local cir- the surrounding environment. to cool unopened containers.



Version 1.18	Revision Date: 06.04.2024	SDS Number: 402632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
		Remove unda so. Evacuate area	maged containers from fire area if it is safe to do a.
SECTION	6: Accidental relea	ase measures	
6.1 Perso	nal precautions, prot	ective equipment a	nd emergency procedures
Perso	onal precautions	Follow safe ha	protective equipment. andling advice (see section 7) and personal pro- nent recommendations (see section 8).
6.2 Enviro	onmental precautions		
Enviro	onmental precautions	Prevent furthe Prevent sprea barriers). Retain and dis	to the environment. In leakage or spillage if safe to do so. ding over a wide area (e.g. by containment or oil spose of contaminated wash water. es should be advised if significant spillages tained.
6.3 Metho	ds and material for c	ontainment and cle	aning up
	ods for cleaning up	: Soak up with i For large spills ment to keep be pumped, si Clean up rema bent. Local or nation posal of this m employed in th mine which re Sections 13 a	nert absorbent material. s, provide dyking or other appropriate contain- material from spreading. If dyked material can tore recovered material in appropriate container. aining materials from spill with suitable absor- nal regulations may apply to releases and dis- naterial, as well as those materials and items ne cleanup of releases. You will need to deter- gulations are applicable. Ind 15 of this SDS provide information regarding r national requirements.
6.4 Refere	ence to other sections	5	

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	Avoid inhalation of vapour or mist.
		Do not swallow.
		Do not get in eyes.
		Avoid prolonged or repeated contact with skin.
		Wash skin thoroughly after handling.
		Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-



Version 1.18	Revision Date: 06.04.2024	SDS Numb 402632-00		Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
Hygie	ne measures	environ If exposing flushing place. V nated o The eff engine approp industri	are to prevent ment. sure to chert systems a When using clothing before ective oper- ering contro riate degow al hygiene	ent spills, waste and minimize release to the mical is likely during typical use, provide eye and safety showers close to the working do not eat, drink or smoke. Wash contami- bore re-use. ation of a facility should include review of ols, proper personal protective equipment, <i>v</i> ning and decontamination procedures, monitoring, medical surveillance and the ve controls.
7.2 Condit	ions for safe storage,	including a	ny incomp	atibilities
	rements for storage and containers			abelled containers. Store in accordance with onal regulations.
Advice	e on common storage		store with t oxidizing a	he following product types: gents
-	ic end use(s) fic use(s)	: No data	a 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
Recombinant Bo- vine Somatotropin	Not As- signed	TWA	OEB 3 (>= 10 < 100 μg/m3)	Internal

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

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
Benzyl benzoate	Workers	Inhalation	Long-term systemic effects	5,1 mg/m3
	Workers	Inhalation	Acute systemic ef- fects	102 mg/m3
	Workers	Skin contact	Long-term systemic effects	2,6 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	1,25 mg/m3
	Consumers	Inhalation	Acute systemic ef- fects	25 mg/m3
	Consumers	Skin contact	Long-term systemic effects	1,3 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic	0,4 mg/kg



Ver 1.18	sion 3	Revision Date: 06.04.2024	SDS Num 402632-00		f last issue: 30.09.2023 f first issue: 11.12.2015	
					effects	bw/day
			Consumers	Ingestion	Acute systemic ef- fects	78 mg/kg bw/day
	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

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

Substance name	Environmental Compartment	Value
Benzyl benzoate	Fresh water	0,017 mg/l
Donzyr Bonzoato	Marine water	0,002 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	10,66 mg/kg dry weight (d.w.)
	Marine sediment	1,07 mg/kg dry weight (d.w.)
	Soil	2,12 mg/kg dry weight (d.w.)
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
	Soil	0,456 mg/kg

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.

Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).



Version 1.18	Revision Date: 06.04.2024		DS Number: 2632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015	
Minin	nize open handling.				
Pers	onal protective equip	ment			
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	d protection				
Material		:	Chemical-resistar	nt gloves	
Remarks Skin and body protection		:	Consider double gloving. Work uniform or laboratory coat. Additional body garments should be used based upon the being performed (e.g., sleevelets, apron, gauntlets, dispos suits) to avoid exposed skin surfaces. Use appropriate degowning techniques to remove potentia contaminated clothing.		
Resp	iratory protection	:	 If adequate local exhaust ventilation is not available sure assessment demonstrates exposures outside th ommended guidelines, use respiratory protection. 		
Fi	lter type	:		lates and organic vapour type (A-P)	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Colour Odour Odour Threshold	 suspension opaque, yellow musty No data available 	
рН	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boilir	ng : No data available	
range Flash point	: No data available	
Evaporation rate	: No data available	
Flammability (solid, gas)	: Not applicable	
Upper explosion limit / Uppe flammability limit	er : No data available	
Lower explosion limit / Lowe flammability limit	er : No data available	
Vapour pressure	: No data available	



Versio 1.18	on	Revision Date: 06.04.2024		S Number: 2632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
F	Relative vapour density Relative density		:	No data available	9
F			:	No data available	9
C	Density		:	No data available	9
F O A	Partitio octanol Auto-ig	er solubility n coefficient: n-	::	No data available No data available No data available No data available	÷
V	/iscosi Visc	ty cosity, dynamic	:	No data available	9
	Visc	osity, kinematic	:	No data available	9
E	Explosi	ve properties	:	Not explosive	
C	Oxidiziı	ng properties	:	The substance o	r mixture is not classified as oxidizing.
9.2 Other information Flammability (liquids)		:	No data available	9	
Ν	Molecu	lar weight	:	No data available	9
F	Particle	esize	:	No data available	9

SECTION 10: Stability and reactivity

10.1 Reactivity Not classified as a reactivity ha	zaro	d.
10.2 Chemical stability Stable under normal conditions		
10.3 Possibility of hazardous read	tio	ns
Hazardous reactions	:	Can react with strong oxidizing agents.
10.4 Conditions to avoid		
Conditions to avoid	:	None known.
10.5 Incompatible materials		
Materials to avoid	:	Oxidizing agents



Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
1.18	06.04.2024	402632-00019	Date of first issue: 11.12.2015

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

1.1 Information on toxicologic Information on likely routes exposure						
Acute toxicity Not classified based on avai	ilable	information.				
Product:						
Acute oral toxicity	:	Acute toxicity estimate: > 2.000 mg/kg Method: Calculation method				
Acute inhalation toxicity	:	Acute toxicity estimate: > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method				
Components:						
Recombinant Bovine Som	Recombinant Bovine Somatotropin:					
Acute inhalation toxicity	:	LC50 (Rat): 30.000 mg/l Exposure time: 1 h Test atmosphere: dust/mist				
Benzyl alcohol:						
Acute oral toxicity	:	LD50 (Rat): 1.620 mg/kg				
Acute inhalation toxicity	:	LC50 (Rat): > 4,178 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403				
Benzyl benzoate:						
Acute oral toxicity	:	LD50 (Rat): 1.700 mg/kg				
Acute dermal toxicity	:	LD50 (Rabbit): > 2.000 mg/kg				
Skin corrosion/irritation						
Not classified based on avail	ilable	information.				
Components:						
Recombinant Bovine Som	atotre	opin:				
Species Remarks	:	Rabbit slight irritation				
		9 / 17				



Version 1.18	Revision Date: 06.04.2024	SDS Number: 402632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015				
Benz Speci Metho Resu	od		 Rabbit OECD Test Guideline 404 No skin irritation 				
Bonz	vi honzoato.						
Speci Metho Resu	od	: Rabbit : OECD Test : No skin irrita	Guideline 404 tion				
Serio	ous eye damage/eye	irritation					
Caus	es serious eye irritatio	n.					
Com	ponents:						
Reco	mbinant Bovine Sor	natotropin:					
Speci Rema	ies	: Rabbit : slight irritatio	on				
Benz	yl alcohol:						
Speci Metho Resu	ies od	 Rabbit OECD Test Guideline 405 Irritation to eyes, reversing within 21 days 					
Bana	vi honzoato.						
Speci Resu		: Rabbit : No eye irrita	tion				
Resp	iratory or skin sensi	tisation					
	sensitisation						
-	lassified based on ava	ailable information.					
Resp	iratory sensitisation						
-	lassified based on ava						
Com	ponents:						
Benz	yl alcohol:						
Test	Type sure routes ies od	: Maximisation : Skin contact : Guinea pig : OECD Test : negative					
Benz	yl benzoate:						
Test	Type sure routes	: Local lymph : Skin contact : Mouse	node assay (LLNA)				
		10 /	17				



Version 1.18	Revision Date: 06.04.2024		S Number: 2632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015		
	Method Result		OECD Test Guideline 429 negative			
	n cell mutagenicity classified based on av	ailable	information.			
<u>Com</u>	ponents:					
Benz	yl alcohol:					
Geno	otoxicity in vitro	:	Test Type: Bactor Result: negative	erial reverse mutation assay (AMES)		
Genc	Genotoxicity in vivo		Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative			
Benz	yl benzoate:					
Geno	otoxicity in vitro	:	Test Type: Bactor Result: negative	erial reverse mutation assay (AMES)		
			Result: positive	ro mammalian cell gene mutation test I on data from similar materials		
			Result: negative	mosome aberration test in vitro I on data from similar materials		
Genc	otoxicity in vivo	:	mammalian liver Species: Rat Application Rout Result: negative	e: Ingestion		
	Carcinogenicity Not classified based on availa <u>Components:</u>		information.			
<u>Com</u>						
Spec Appli	cation Route sure time od	:	Mouse Ingestion 103 weeks OECD Test Guid negative	deline 451		

Reproductive toxicity

Not classified based on available information.



Version 1.18	Revision Date: 06.04.2024	SDS Number: 402632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015		
Com	oonents:				
	yl alcohol: ts on fertility	Species: Ra Application Result: nega	Route: Ingestion		
Effect ment	ts on foetal develop-	 Test Type: Embryo-foetal development Species: Mouse Application Route: Ingestion Result: negative Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative 			
	yl benzoate: ts on foetal develop-				
STOT Not cl Repe	lassified based on ava - repeated exposur lassified based on ava ated dose toxicity	e			
	oonents:				
Speci	sure time	: Rat : 90 d	nt adverse effects were reported		
Speci NOAE Applic	EL cation Route sure time	: 28 Days	lust/mist/fume) Guideline 412		
Speci NOAE Applic		: Rat : 781 mg/kg : Skin contact : 4 Weeks			

Aspiration toxicity

Not classified based on available information.



Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
1.18	06.04.2024	402632-00019	Date of first issue: 11.12.2015

SECTION 12: Ecological information

12.1 Toxicity		
Components:		
Benzyl alcohol:		
Toxicity 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
Benzyl benzoate:		
Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 2,32 mg/l Exposure time: 96 h Method: Regulation (EC) No. 440/2008, Annex, C.1
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3,09 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0,475 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		NOEC (Pseudokirchneriella subcapitata (green algae)): 0,247 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic tox- icity)	:	1
Toxicity to microorganisms	:	EC50 : > 10.000 mg/l



Version 1.18	Revision Date: 06.04.2024	-	DS Number: 02632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
			Exposure time: 3 Method: ISO 819	
aqua	city to daphnia and other atic invertebrates (Chron- xicity)			
12.2 Per:	sistence and degradabi	lity		
Com	ponents:			
	zyl alcohol: legradability	:	Result: Readily t Biodegradation: Exposure time: 1	92 - 96 %
Ben	zyl benzoate:			
Biod	egradability	:	Result: Readily & Biodegradation: Exposure time: 2 Method: Directiv	94 %
12.3 Bioa	accumulative potential			
Com	ponents:			
Part	zyl alcohol: ition coefficient: n- nol/water	:	log Pow: 1,05	
	zyl benzoate:			
	ition coefficient: n- nol/water	:	log Pow: 4 Method: OECD	Test Guideline 117
	bility in soil lata available			
12.5 Res	ults of PBT and vPvB a	sse	ssment	
	<u>duct:</u> essment	:	to be either pers	nixture contains no components considered istent, bioaccumulative and toxic (PBT), or nd very bioaccumulative (vPvB) at levels of
12.6 Oth	er adverse effects			
	duct: ocrine disrupting poten-	:	ered to have end	nixture does not contain components consid- docrine disrupting properties according to 67(f) or Commission Delegated regulation
			14 / 17	



Version 1.18	Revision Date: 06.04.2024	SDS Number: 402632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015
		(EU) 2017/210 levels of 0.1%	00 or Commission Regulation (EU) 2018/605 at or higher.
SECTION	N 13: Disposal cons	iderations	
13.1 Wast	e treatment methods		
Produ	uct	According to t are not produc Waste codes discussion wit	accordance with local regulations. he European Waste Catalogue, Waste Codes ct specific, but application specific. should be assigned by the user, preferably in h the waste disposal authorities. e of waste into sewer.
Conta	aminated packaging	: Empty contain dling site for r	ers should be taken to an approved waste han- ecycling or disposal. e specified: Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

		N I I I I
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 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 Packing group		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good



Version 1.18	Revision Date: 06.04.2024	SDS Number: 402632-00019	Date of last issue: 30.09.2023 Date of first issue: 11.12.2015	
IMDG		: Not regulated as	a dangerous good	
IATA ((Cargo)	: Not regulated as	s a dangerous good	
IATA ((Passenger)	: Not regulated as a dangerous good		
14.5 Environmental hazards Not regulated as a dangerous good				
14.6 Special precautions for user Not applicable				
14.7 Trans Remar	•	•	ool and the IBC Code or product as supplied.	

SECTION 15: Regulatory information

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

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

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

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

Full text of H-Statements

Full text of other abbreviations	
H411 :	Toxic to aquatic life with long lasting effects.
H400 :	Very toxic to aquatic life.
H332 :	Harmful if inhaled.
H319 :	Causes serious eye irritation.
H302 :	Harmful if swallowed.

Acute Tox.:Acute toxicityAquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardEye Irrit.:Eye irritation

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 Test-



Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
1.18	06.04.2024	402632-00019	Date of first issue: 11.12.2015

ing 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; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to	:	Internal technical data, data from raw material SDSs, OECD
compile the Safety Data		eChem Portal search results and European Chemicals Agen-
Sheet		cy, http://echa.europa.eu/

Classification of the mixtu	Classification procedure:	
Eye Irrit. 2	H319	Calculation method
Aquatic Chronic 3	H412	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.

ZA / EN