

according to the Hazardous Products Regulations

Fenbendazole (0.5%) Crumbles Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020

SECTION 1. IDENTIFICATION

Product name	:	Fenbendazole (0.5%) Crumbles Formulation
Other means of identification	:	No data available

Manufacturer or supplier's details

Company name of supplier Address		Merck & Co., Inc 126 E. Lincoln Avenue
	-	Rahway, New Jersey U.S.A. 07065
Telephone	:	908-740-4000
Emergency telephone	:	1-908-423-6000
E-mail address	:	EHSDATASTEWARD@merck.com

Recommended use of the chemical and restrictions on use

Recommended use	:	Veterinary product
Restrictions on use	:	Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accorda	nce with the Hazardous Products Regulations

Reproductive toxicity	:	Category 2

GHS label elements

Hazard Statements

Hazard pictograms



Signal Word : Warning

: H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Precautionary Statements

Prevention:

:

P201 Obtain special instructions before use.P202 Do not handle until all safety precautions have been read and understood.P280 Wear protective gloves, protective clothing, eye protection and face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

according to the Hazardous Products Regulations



Fenbendazole (0.5%) Crumbles Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Calcium carbonate	Carbonic acid calcium salt	471-34-1	>= 1 - < 5 *
Paraffin oil	No data availa- ble	8012-95-1	>= 1 - < 5 *
fenbendazole	No data availa- ble	43210-67-9	>= 0.1 - < 1 *

* Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	:	If inhaled, remove to fresh air. Get medical attention.
In case of skin contact	:	In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	:	If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
Notes to physician	:	Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

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



Vers 1.11	-	Revision Date: 09/28/2024		9S Number: 16954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020	
	media					
	Specific fighting	c hazards during fire	:	Exposure to comb	pustion products may be a hazard to health.	
	Hazard ucts	ous combustion prod-	:	Carbon oxides Metal oxides		
	Specific ods	c extinguishing meth-	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to a so. Evacuate area.		
	Special protective equipment for fire-fighters		:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.		
SEC	SECTION 6. ACCIDENTAL RELE		ASE	EMEASURES		
	Personal precautions, protec- tive equipment and emer- gency procedures		:	Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).		
	Environmental precautions		:	Retain and dispos	akage or spillage if safe to do so. e of contaminated wash water. should be advised if significant spillages	
		ls and materials for ment and cleaning up	:	container for dispo Local or national r disposal of this ma employed in the c determine which r Sections 13 and 1	tum up spillage and collect in suitable osal. regulations may apply to releases and aterial, as well as those materials and items leanup of releases. You will need to egulations are applicable. 5 of this SDS provide information regarding tional requirements.	

SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	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
		assessment
		Take care to prevent spills, waste and minimize release to the



Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020
	tions for safe storage ials to avoid	Store in accorda	y labeled containers. ance with the particular national regulations. h the following product types: agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Calcium carbonate	471-34-1	TWAEV (to- tal dust)	10 mg/m³	CA QC OEL
		TWA	10 mg/m³ (Calcium car- bonate)	CA AB OEL
		TWA (Total dust)	10 mg/m ³	CA BC OEL
		TWA (respir- able dust fraction)	3 mg/m³	CA BC OEL
		STEL	20 mg/m ³	CA BC OEL
Paraffin oil	8012-95-1	TWA (Mist)	5 mg/m ³	CA AB OEL
		STEL (Mist)	10 mg/m ³	CA AB OEL
		TWAEV (Mist - Inhalable dust)	5 mg/m³	CA QC OEL
		TWA (Mist)	1 mg/m ³	CA BC OEL
		TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH
fenbendazole	43210-67-9	TWA	100 μg/m3 (OEB 2)	Internal

Engineering measures	:	Use feasible engineering controls to minimize exposure to compound. All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.
		All engineering controls should be implemented by facili design and operated in accordance with GMP principles

Personal protective equipment

Respiratory protection	:	If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
Filter type Hand protection	:	Combined particulates and organic vapor type
Material	:	Chemical-resistant gloves
Eye protection	:	Wear safety glasses with side shields or goggles.



Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020
	and body protection ne measures	 mists or aeroso Wear a faceshi potential for direa aerosols. Work uniform of If exposure to of eye flushing system working place. When using do Wash contamin The effective of engineering contaction 	ronment or activity involves dusty conditions, ls, wear the appropriate goggles. eld or other full face protection if there is a ect contact to the face with dusts, mists, or r laboratory coat. hemical is likely during typical use, provide stems and safety showers close to the not eat, drink or smoke. lated clothing before re-use. beration of a facility should include review of ntrols, proper personal protective equipment, gowning and decontamination procedures, ne monitoring, medical surveillance and the rative controls.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	pellets
Color	:	No data available
Odor	:	No data available
Odor Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	No data available
Flammability (liquids)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not applicable
Relative vapor density	:	Not applicable
Relative density	:	No data available



Version 1.11	Revision Date: 09/28/2024	SDS Number: 6116954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020
Dens	ity	: No data avail	able
	oility(ies) ater solubility	: No data avail	able
	ion coefficient: n- ol/water	: Not applicable	9
	gnition temperature	: No data avail	able
Deco	mposition temperature	: No data avail	able
Visco Vi	sity scosity, kinematic	: Not applicable	e
Explo	sive properties	: Not explosive	
Oxidi	zing properties	: The substanc	e or mixture is not classified as oxidizing.
Moleo	cular weight	: No data avail	able
	cle characteristics cle size	: No data avail	able

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	:	Not classified as a reactivity hazard. Stable under normal conditions. Can react with strong oxidizing agents.
Conditions to avoid Incompatible materials Hazardous decomposition products		None known. Oxidizing agents No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Components:

Calcium carbonate:

:	LD50 (Rat): > 2,000 mg/kg
	Method: OECD Test Guideline 420
	Assessment: The substance or mixture has no acute oral tox-
	icity
	:



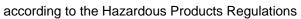
according to the Hazardous Products Regulations

rsion 1	Revision Date: 09/28/2024	SDS Numbe 6116954-000	
Acute	inhalation toxicity	Exposure Test atm Method:	at): > 3 mg/l e time: 4 h osphere: dust/mist OECD Test Guideline 403 nent: The substance or mixture has no acute inhala- ity
Acute	dermal toxicity	Method:	at): > 2,000 mg/kg OECD Test Guideline 402 nent: The substance or mixture has no acute dermal
Paraf	fin oil:		
Acute	oral toxicity	: LD50 (Ra	at): > 5,000 mg/kg
Acute	dermal toxicity		abbit): > 2,000 mg/kg nent: The substance or mixture has no acute dermal
fenbe	ndazole:		
Acute	oral toxicity	: LD50 (Ra	at): > 10,000 mg/kg
		LD50 (M	ouse): > 10,000 mg/kg
Not cl	corrosion/irritation assified based on av	·	
Not cl		·	
Not cl <u>Comp</u> Calcie	assified based on av ponents: um carbonate:	ailable informatio	
Not cl <u>Comp</u> Calcie Speci	assified based on av ponents: um carbonate: es	ailable informatio : Rabbit	n.
Not cl <u>Comp</u> Calcie	assified based on av ponents: um carbonate: es od	ailable informatio : Rabbit	est Guideline 404
Not cl <u>Comp</u> Calcie Speci Metho Resul	assified based on av ponents: um carbonate: es od	ailable informatio	est Guideline 404
Not cl <u>Comp</u> Calcie Speci Metho Resul	assified based on av ponents: um carbonate: es od t fin oil:	ailable informatio	est Guideline 404
Not cl Comp Calcin Speci Metho Resul	assified based on av ponents: um carbonate: es od t fin oil: es	ailable informatio : Rabbit : OECD To : No skin i	est Guideline 404 rritation
Not cl Comp Calcin Speci Metho Resul Paraf Speci Resul	assified based on av ponents: um carbonate: es od t fin oil: es	ailable informatio : Rabbit : OECD To : No skin i : Rabbit	est Guideline 404 rritation
Not cl Comp Calcie Speci Metho Resul Paraf Speci Resul fenbe	assified based on av <u>ponents:</u> um carbonate: es od t fin oil: es t ondazole: es	ailable informatio : Rabbit : OECD To : No skin i : Rabbit	est Guideline 404 rritation
Not cl Comp Calcie Speci Metho Resul Paraf Speci Resul	assified based on av <u>ponents:</u> um carbonate: es od t fin oil: es t ondazole: es	ailable informatio : Rabbit : OECD To : No skin i : Rabbit : No skin i	est Guideline 404 rritation
Not cl Comp Calcin Speci Metho Resul Paraf Speci Resul fenbe Speci Resul	assified based on av <u>ponents:</u> um carbonate: es od t fin oil: es t ondazole: es	ailable information : Rabbit : OECD To : No skin i : Rabbit : No skin i : Rabbit : No skin i irritation	n. est Guideline 404 rritation rritation
Not cl Comp Calcie Speci Metho Resul Paraf Speci Resul fenbe Speci Resul Speci Resul	assified based on av <u>ponents:</u> um carbonate: es od t fin oil: es t endazole: es t us eye damage/eye	ailable information : Rabbit : OECD To : No skin i : Rabbit : No skin i : Rabbit : No skin i irritation	n. est Guideline 404 rritation rritation
Not cl Comp Calcin Speci Metho Resul Paraf Speci Resul fenbe Speci Resul Secio Not cl Comp	assified based on av <u>ponents:</u> um carbonate: es bd t fin oil: es t us eye damage/eye assified based on av	ailable information : Rabbit : OECD To : No skin i : Rabbit : No skin i : Rabbit : No skin i irritation	n. est Guideline 404 rritation rritation
Not cl Comp Calcin Speci Metho Resul Paraf Speci Resul fenbe Speci Resul Secio Not cl Comp	assified based on av <u>ponents:</u> um carbonate: es od t fin oil: es t us eye damage/eye assified based on av <u>ponents:</u> um carbonate: es	ailable information : Rabbit : OECD To : No skin i : Rabbit : No skin i : Rabbit : No skin i irritation	n. est Guideline 404 rritation rritation n.



according to the Hazardous Products Regulations

Vers 1.11	ion	Revision Date: 09/28/2024		OS Number: 16954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020
	Method	I	:	OECD Test Guide	eline 405
	Paraffi	n oil:			
	Species Result	6	:	Rabbit No eye irritation	
	fenben	dazole:			
	Species Result	5	:	Rabbit No eye irritation	
	Respira	atory or skin sensitiz	atio	n	
		ensitization ssified based on availa	able	information.	
	•	atory sensitization ssified based on availa	able	information.	
	Compo				
	Test Ty	of exposure	: : : : : : : : : : : : : : : : : : : :	Local lymph node Skin contact Mouse OECD Test Guide negative	
		ell mutagenicity ssified based on availa	able	information.	
	<u>Compo</u>	onents:			
		n carbonate: xicity in vitro	:	Test Type: Bacter Method: OECD To Result: negative	rial reverse mutation assay (AMES) est Guideline 471
				Test Type: Chrom Method: OECD To Result: negative	nosome aberration test in vitro est Guideline 473
				Test Type: In vitro Method: OECD To Result: negative	o mammalian cell gene mutation test est Guideline 476
,	fenben	dazole:			
	Genoto	xicity in vitro	:	Test Type: Bacter Result: negative	ial reverse mutation assay (AMES)
				Test Type: DNA F Result: negative	Repair





Version 1.11	Revision Date: 09/28/2024		8 Number: 6954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020
			Test Type: Chro Result: negative	omosomal aberration
				ouse lymphoma cells ation: Metabolic activation
	nogenicity lassified based on availa	ahla ii	oformation	
	oonents:		normation.	
	endazole:			
Speci Applic	es cation Route sure time EL	:	Mouse oral (feed) 2 Years 405 mg/kg body negative	/ weight
Expos NOAE Resul	cation Route sure time EL	:	Rat Oral 2 Years 5 mg/kg body w negative Lymph nodes, L	-
-	oductive toxicity ected of damaging fertili	ity. Su	spected of dam	naging the unborn child.
<u>Comp</u>	ponents:			
Calci	um carbonate:			
Effect	ts on fertility		reproduction/de Species: Rat Application Rou	Test Guideline 422
Effect	ts on fetal development		Species: Rat Application Rou	Test Guideline 414
fenbe	endazole:			
Effect	ts on fertility		Species: Rat Application Rou General Toxicity	ee-generation reproduction toxicity study tte: oral (feed) y Parent: NOAEL: 15 mg/kg body weight .: 45 mg/kg body weight

SAFETY DATA SHEET according to the Hazardous Products Regulations



Fenbendazole (0.5%) Crumbles Formulation

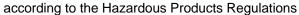
Vers 1.11		Revision Date: 09/28/2024		9S Number: 16954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020	
				Result: Effects on	fertility.	
	Effects on fetal development		:	Test Type: Development Species: Dog, female Application Route: Oral Developmental Toxicity: LOAEL: 100 mg/kg body weigh Result: Embryotoxic effects and adverse effects on the offspring were detected., No teratogenic effects.		
				Species: Rabbit Application Route	oxicity: NOAEL: 25 mg/kg body weight	
				Species: Rabbit Application Route	ro-fetal development : Oral oxicity: LOAEL: 63 mg/kg body weight	
				Species: Rat Application Route Developmental To	ro-fetal development : Oral oxicity: NOAEL: 120 mg/kg body weight o on fetal development.	
	Reprod sessme	luctive toxicity - As- ent	:	fertility, based on	f adverse effects on sexual function and animal experiments., Some evidence of n development, based on animal	
		single exposure ssified based on availa	able	information.		
	STOT-repeated exposure Not classified based on availal			ble information.		
	Compo	onents:				
			:		lervous system, Lymph nodes ge to organs through prolonged or repeated	

Repeated dose toxicity

Components:

Calcium	carbonate:
---------	------------

mg/kg
า้





Fenbendazole (0.5%) Crumbles Formulation

Version 1.11	Revision Date: 09/28/2024		DS Number: 16954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020
Met	hod	:	OECD Test Guide	eline 422
Par	affin oil:			
LÖ/ App	Species LOAEL Application Route Exposure time		Rat, female 161 mg/kg Ingestion 90 Days	
fen	bendazole:			
LÖ/ App Exp	ecies AEL plication Route posure time get Organs	:	Rat 500 mg/kg Oral 2 Weeks Kidney, Liver	
NO App Exp	ecies AEL plication Route posure time narks	:	Rat > 2,500 mg/kg Oral 30 Days No significant adv	verse effects were reported
LÔ/ App Exp Tar	ecies AEL blication Route bosure time get Organs nptoms	:	Rat 1,600 mg/kg Oral 90 Days Central nervous s Tremors	system
NO LO/ Exp	ecies AEL AEL oosure time get Organs		Dog 4 mg/kg 8 mg/kg 6 Months Stomach, Nervou	s system, Lymph nodes

Aspiration toxicity

Not classified based on available information.

Components:

Paraffin oil:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

fenbendazole:

No aspiration toxicity classification

Experience with human exposure

Components:

fenbendazole:

according to the Hazardous Products Regulations



Version 1.11	Revision Date: 09/28/2024		9S Number: 16954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020			
Ingest	Ingestion		: Symptoms: Rapid respiration, Salivation, anorexia, Diarrhea				
SECTION	12. ECOLOGICAL INFO	ORN	IATION				
Ecoto	oxicity						
Comp	oonents:						
	u m carbonate: ty to fish	:	Exposure time: 96	Vater Accommodated Fraction			
	ty to daphnia and other ic invertebrates	:	Exposure time: 48	Vater Accommodated Fraction			
Toxici plants	ty to algae/aquatic	:	mg/l Exposure time: 72	Vater Accommodated Fraction			
			mg/l Exposure time: 72	Vater Accommodated Fraction			
Toxici	ty to microorganisms	:	NOEC: 1,000 mg/ Exposure time: 3 Method: OECD Te	h			
			EC50: > 1,000 mg Exposure time: 3 Method: OECD Te	h			
Paraf	fin oil:						
Toxici	ty to fish	:	Exposure time: 96 Test substance: V	hus maximus (turbot)): > 100 mg/l 5 h Vater Accommodated Fraction on data from similar materials			
	ty to daphnia and other ic invertebrates	:	Exposure time: 48 Test substance: V	sa (Calanoid copepod)): > 100 mg/l 3 h Vater Accommodated Fraction on data from similar materials			
Toxici plants	ty to algae/aquatic	:	Exposure time: 72	na costatum (marine diatom)): > 100 mg/l 2 h Vater Accommodated Fraction			

SAFETY DATA SHEET according to the Hazardous Products Regulations



Versio 1.11	'n	Revision Date: 09/28/2024	-	9S Number: 16954-00012	Date of last issue: 09/30/2023 Date of first issue: 07/17/2020
				Remarks: Based	on data from similar materials
				Exposure time: 72 Test substance: V	nema costatum (marine diatom)): > 1 mg/l 2 h Vater Accommodated Fraction on data from similar materials
fe	enben	dazole:			
Т	oxicity	to fish	:	LC50 (Lepomis m Exposure time: 21	acrochirus (Bluegill sunfish)): 0.009 mg/l I d
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD Te	
ac		to daphnia and other invertebrates (Chron- ty)	:	NOEC (Daphnia r Exposure time: 21 Method: OECD Te	
		ence and degradabili a available	ty		
В	ioacc	umulative potential			
<u>C</u>	ompo	nents:			
Pa	araffir	n oil:			
	artitior ctanol/	n coefficient: n- /water	:	log Pow: > 4 Remarks: Calcula	tion
Pa	artitior	dazole: n coefficient: n-	:	log Pow: 3.32	
	ctanol/	vwater y in soil			
	-	-			
	-	nents:			
		dazole: tion among environ-	:	log Koc: 3.8 - 4.7	
		compartments	•	Method: FDA 3.08	3
-		dverse effects available			
SECTI	ION 13	3. DISPOSAL CONSIL	DER	ATIONS	
ח	isnoe	al methods			
	-	rom residues	:	Do not dispose of	waste into sewer.
C	ontam	inated packaging	:	Dispose of in acco Empty containers	ordance with local regulations. should be taken to an approved waste ecycling or disposal.

according to the Hazardous Products Regulations



Fenbendazole (0.5%) Crumbles Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name Class	:	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fenbendazole)
Class Packing group Labels Environmentally hazardous	:	9 III 9 yes
IATA-DGR		
UN/ID No.	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (fenbendazole)
Class	:	9
Packing group	:	
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	956
Packing instruction (passen- ger aircraft)	:	956
Environmentally hazardous	:	yes
IMDG-Code		
UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Class Packing group Labels EmS Code Marine pollutant		(fenbendazole) 9 III 9 F-A, S-F yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

TDG UN number Proper shipping name	:	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fenbendazole)
Class	:	9
Packing group	:	III
Labels	:	9
ERG Code	:	171
Marine pollutant	:	yes(fenbendazole)



Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020

Special precautions for user

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.

SECTION 15. REGULATORY INFORMATION

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

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH CA AB OEL	:	USA. ACGIH Threshold Limit Values (TLV) Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL CA QC OEL	:	Canada. British Columbia OEL Québec. Regulation respecting occupational health and safe- ty, Schedule 1, Part 1: Permissible exposure values for air- borne contaminants
ACGIH / TWA CA AB OEL / TWA CA AB OEL / STEL CA BC OEL / TWA CA BC OEL / STEL CA QC OEL / TWAEV	:	8-hour, time-weighted average 8-hour Occupational exposure limit 15-minute occupational exposure limit 8-hour time weighted average short-term exposure limit Time-weighted average exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect



Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
1.11	09/28/2024	6116954-00012	Date of first issue: 07/17/2020

Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
Revision Date Date format	:	09/28/2024 mm/dd/yyyy

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.

CA / Z8