



Versi 11.1		Revision Date: 2024/09/28		S Number: 1674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02	
1. PR	RODUC	T AND COMPANY ID	ENT	IFICATION		
(Chemio	cal product name	:	Altrenogest (0.49	%) Formulation	
	Other means of identification		:	REGUMATE ORAL PROGESTAGEN FOR PIGS (45680)		
	••	er's company name, and name of supplier		r ess and phone n MSD	umber	
	Addres	S	:	Kumagaya, Saita Menuma factory	ama Prefecture, Xicheng 810 MSD Co., Ltd.	
-	Teleph	one	:	048-588-8411		
I	E-mail	address	:	EHSDATASTEW	VARD@msd.com	
l	Emerge	ency telephone numbe	r:	+1-908-423-600	0	

Recommended use of the chemical and restrictions on use

Recommended use	:	Veterinary product
		NI 6 11 11

Restrictions on use : Not applicable

2. HAZARDS IDENTIFICATION

GHS classification of chemic Reproductive toxicity		product Category 1B
Long-term (chronic) aquatic hazard	:	Category 1
GHS label elements		
Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H360 May damage fertility or the unborn child. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P273 Avoid release to the environment.



Version	Revision Date:	SDS Number:	Date of last issue: 2024/07/06
11.1	2024/09/28	641674-00027	Date of first issue: 2016/05/02

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

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

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

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

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture
Substance / Mixture	•	wixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	ENCS No.
Soya oil	8001-22-7	>= 90 - <= 100	-
altrenogest	850-52-2	>= 0.3 - < 1	-
2,6-Di-tert-butyl-p-cresol	128-37-0	>= 0.0025 - < 0.025	3-540, 9-1805

4. FIRST AID MEASURES

General 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.
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	:	May damage fertility or the unborn child.
and effects, both acute and		



Vers 11.1		-	0S Number: 1674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
	delayed Protection of first-aiders	:		ers should pay attention to self-protection, nmended personal protective equipment
	Notes to physician	:	when the potentia	all for exposure exists (see section 8). cally and supportively.
5. FI	REFIGHTING MEASURES			
	Suitable extinguishing media	a :	Water spray Alcohol-resistant Carbon dioxide (C Dry chemical	
	Unsuitable extinguishing media	:	None known.	
	Specific hazards during fire- fighting	:	Exposure to com	pustion products may be a hazard to health.
	Hazardous combustion prod ucts	- :	Carbon oxides	
	Specific extinguishing meth- ods	:	cumstances and tuse water spray to	measures that are appropriate to local cir- the surrounding environment. to cool unopened containers. ged containers from fire area if it is safe to do
	Special protective equipment for firefighters	ıt :		e, wear self-contained breathing apparatus. tective equipment.
6. A	CCIDENTAL RELEASE ME	ASU	RES	
	Personal precautions, protective equipment and emer-	- :		tective equipment. ing advice (see section 7) and personal pro-

gency procedures	tective equipment recommendations (see section 8).
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.
Methods and materials for : containment and 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-



Version 11.1	Revision Date: 2024/09/28	SDS Number: 641674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
		posal of this employed in mine which Sections 13	onal regulations may apply to releases and dis- material, as well as those materials and items the cleanup of releases. You will need to deter- regulations are applicable. and 15 of this SDS provide information regarding or national requirements.
7. HANDL	ING AND STORAGE		
Hand	lina		
	nical measures		ering measures under EXPOSURE //PERSONAL PROTECTION section.
Local/	Total ventilation		rentilation is unavailable, use with local exhaust
	e on safe handling	: Do not get o Do not breat Do not swall Avoid contac Handle in ac practice, bas sessment Keep contain Take care to environment	ct with eyes. cordance with good industrial hygiene and safety sed on the results of the workplace exposure as- ner tightly closed. prevent spills, waste and minimize release to the
	ance of contact ne measures	flushing syst place. When using Wash contai The effective engineering appropriate industrial hys	ents to chemical is likely during typical use, provide eye tems and safety showers close to the working do not eat, drink or smoke. minated clothing before re-use. e operation of a facility should include review of controls, proper personal protective equipment, degowning and decontamination procedures, giene monitoring, medical surveillance and the histrative controls.
Stora	ge		
	tions for safe storage	Store locked Keep tightly Store in acc	closed. ordance with the particular national regulations. with the following product types:
Packa	aging material	: Unsuitable n	naterial: None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Threshold limit value and permissible exposure limits for each component in the work environment



Version	Revision Date:	SDS Number:	Date of last issue: 2024/07/06
11.1	2024/09/28	641674-00027	Date of first issue: 2016/05/02

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Concentra- tion standard / Permissible con- centration	Basis
altrenogest	850-52-2	TWA	1 µg/m3 (OEB 4)	Internal
	Further infor	mation: Skin		
		Wipe limit	10 µg/100 cm ²	Internal
2,6-Di-tert-butyl-p-cresol	128-37-0	8h-OEL-M	10 mg/m3	JP ISHL OEL 577-2(2)
		TWA (Inhal- able fraction and vapor)	2 mg/m3	ACGIH

Engineering measures :	All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Essentially no open handling permitted. Use closed processing systems or containment technologies. If handled in a laboratory, use a properly designed biosafety cabinet, fume hood, or other containment device if the poten- tial exists for aerosolization. If this potential does not exist, handle over lined trays or benchtops.
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. Particulates type Filter type : Hand protection Material : Chemical-resistant gloves Remarks Consider double gloving. : Wear safety glasses with side shields or goggles. Eye protection : 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. Skin and body protection Work uniform or laboratory coat. : Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, dis-

posable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	liquid
Colour	:	No data available

contaminated clothing.



Vers 11.1		Revision Date: 2024/09/28		S Number: 674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
	Odour		:	No data available	
	Odour 7	Fhreshold	:	No data available	
	Melting	point/freezing point	:	No data available	
		point, initial boiling nd boiling range	:	No data available	
	Flamma	ability (solid, gas)	:	Not applicable	
	Flamma	ability (liquids)	:	No data available	
	Upp	explosion limit and uppo er explosion limit / Up- flammability limit			
		er explosion limit / er flammability limit	:	No data available	
	Flash p	oint	:	No data available	
	Decom	position temperature	:	No data available	
	рН		:	No data available	
	Evapora	ation rate	:	No data available	
	Auto-ig	nition temperature	:	No data available	
	Viscosit Visc	ty osity, kinematic	:	No data available	
	Solubilit Wate	ty(ies) er solubility	:	No data available	
	Partition octanol	n coefficient: n- /water	:	No data available	
	Vapour	pressure	:	No data available	
		and / or relative densit ative density	ty :	No data available	
	Den	sity	:	No data available	
	Relative	e vapour density	:	No data available	
	Explosi	ve properties	:	Not explosive	



Version 11.1	Revision Date: 2024/09/28		Number: 74-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02			
Oxidi	zing properties	: '	The substance	e or mixture is not classified as oxidizing.			
Mole	cular weight	:	No data availa	able			
	Particle characteristics Particle size		: No data available				
10. STAB	ILITY AND REACTIVIT	Y					
	tivity hical stability ibility of hazardous reac	: :	Stable under i	as a reactivity hazard. normal conditions. n strong oxidizing agents.			
Cond Incon	itions to avoid npatible materials rdous decomposition ucts	: (None known. Oxidizing age No hazardous	nts decomposition products are known.			
1. TOXIC	OLOGICAL INFORMA	TION					
Inforr expos	nation on likely routes o sure	S II	nhalation Kin contact ngestion Sye contact				
	e toxicity lassified based on avail	able in	formation.				
Prod	uct:						
Acute	e oral toxicity	: A N	cute toxicity e lethod: Calcu	estimate: > 2,000 mg/kg lation method			
Com	ponents:						
altrei	nogest:						
Acute	e oral toxicity	: L	D50 (Rat): 17	7 mg/kg			
		L	D50 (Dog): 40	00 mg/kg			
2,6-D	i-tert-butyl-p-cresol:						
Acute	e oral toxicity		D50 (Rat): > 6 lethod: OECE	5,000 mg/kg) Test Guideline 401			
Acute	e dermal toxicity	N A		2,000 mg/kg 0 Test Guideline 402 The substance or mixture has no acute dermal			



Version	Revision Date:	SDS Number:	Date of last issue: 2024/07/06
11.1	2024/09/28	641674-00027	Date of first issue: 2016/05/02

Skin corrosion/irritation

Not classified based on available information.

Components:

2,6-Di-tert-butyl-p-cresol:

Species :	Rabbit
Method :	OECD Test Guideline 404
Result :	No skin irritation
Remarks :	Based on data from similar materials

Serious eye damage/eye irritation

Not classified based on available information.

Components:

2,6-Di-tert-butyl-p-cresol:

Species :	Rabbit
Result :	No eye irritation
Method :	OECD Test Guideline 405
Remarks :	Based on data from similar materials

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

2,6-Di-tert-butyl-p-cresol:

:	Human repeat insult patch test (HRIPT)
:	Skin contact
:	Humans
:	negative
	:

Germ cell mutagenicity

Not classified based on available information.

Components:

altrenogest:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES) Result: negative

Test Type: Chromosome aberration test in vitro Result: negative

Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)



rsion .1	Revision Date: 2024/09/28	SDS Number: 641674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
		Result: negat	tive
2,6-D	i-tert-butyl-p-cresol:		
Geno	toxicity in vitro	: Test Type: Ba Result: negat	acterial reverse mutation assay (AMES) tive
		Test Type: In Result: negat	vitro mammalian cell gene mutation test
		Test Type: C Result: negat	hromosome aberration test in vitro tive
Geno	toxicity in vivo	cytogenetic to Species: Rat	coute: Ingestion
Carai	nononioitu		
	nogenicity	ilable information	
Not cl	assified based on ava	ilable information.	
Not cl <u>Comp</u>	assified based on ava	ilable information.	
Not cl <u>Comr</u> 2,6-D	assified based on ava ponents: i-tert-butyl-p-cresol:		
Not cl <u>Comp</u> 2,6-D Speci	assified based on ava ponents: i-tert-butyl-p-cresol: es	: Rat	
Not cl <u>Comp</u> 2,6-D Speci Applic	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route	: Rat : Ingestion	
Not cl <u>Comp</u> 2,6-D Speci Applic	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time	: Rat	
Not cl <u>Comr</u> 2,6-D Speci Applic Expos Resul	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time t	: Rat : Ingestion : 22 Months	
Not cl <u>Comp</u> 2,6-D Speci Applic Expos Resul Repro	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time	: Rat : Ingestion : 22 Months : negative	
Not cl <u>Comp</u> 2,6-D Speci Applic Expos Resul Resul May c	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time t coductive toxicity	: Rat : Ingestion : 22 Months : negative	
Not cl <u>Comp</u> 2,6-D Speci Applic Expos Resul Resul May co <u>Comp</u>	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time t oductive toxicity damage fertility or the u <u>conents:</u>	: Rat : Ingestion : 22 Months : negative	
Not cl <u>Comp</u> 2,6-D Speci Applic Expos Resul Repro May co <u>Comp</u> altren	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time t bductive toxicity damage fertility or the u	: Rat : Ingestion : 22 Months : negative unborn child. : Test Type: The Species: Rat Application R Fertility: NOA	
Not cl <u>Comp</u> 2,6-D Speci Applic Expos Resul Repro May co <u>Comp</u> altren	assified based on ava <u>conents:</u> i-tert-butyl-p-cresol: es cation Route sure time t oductive toxicity damage fertility or the u <u>conents:</u> nogest:	: Rat : Ingestion : 22 Months : negative unborn child. : Test Type: The Species: Rat Application R Fertility: NOA Result: Effect Test Type: Fe Species: Mor Application R	Route: Oral NEL: 0.016 mg/kg body weight ts on fertility, No effects on mating performance ertility/early embryonic development hkey, female

2,6-Di-tert-butyl-p-cresol:

SAFETY DATA SHEET



Version 11.1	Revision Date: 2024/09/28		Number: 74-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
Effect	s on fertility	S A	est Type: Two-g pecies: Rat pplication Route esult: negative	eneration reproduction toxicity study
Effect ment	s on foetal develop-	S A	est Type: Embry pecies: Rat pplication Route esult: negative	vo-foetal development
	- single exposure assified based on avai	lable inf	ormation.	
STOT	- repeated exposure			
	assified based on avai	lable inf	ormation.	
<u>Comp</u>	oonents:			
altren	ogest:			
Expos Targe	sure routes to Organs ssment	: Ir : N	ral nmune system, lay cause dama xposure.	Adrenal gland ge to organs through prolonged or repeated
	sure routes t Organs		ral ituitary gland	
2,6-D	i-tert-butyl-p-cresol:			
	ssment		o significant hea ons of 100 mg/k	alth effects observed in animals at concentra- g bw or less.
Repe	ated dose toxicity			
Comp	oonents:			
Soya	oil:			
Speci NOAE Applic	es	: 4 : Ir	at ,000 mg/kg ngestion 0 h	
altren	ogest:			
Speci NOAE Applic Expos	es EL cation Route sure time t Organs	: 0 : C : 1 : Ir ti	at .06 mg/kg Iral 3 Weeks nmune system, ve organs, Adre ffects on fertility	male reproductive organs, female reproduc- nal gland



Version 11.1	Revision Date: 2024/09/28	SDS Number 641674-0002	
Spec		: Pig	<i>a</i>
NOA	EL cation Route	: 0.004 mg/ : Oral	′kg
	sure time	: 13 Weeks	i
	et Organs		oductive organs, female reproductive organs
Rema	arks	: Effects on	fertility
Spec		: Pig	
NOA	EL cation Route	: 0.002 mg/ : Oral	′kg
	sure time	: 1 yr	
Targe	et Organs	: male repr	oductive organs, Pituitary gland
Rema	arks	: Effects on	fertility
Spec		: Horse	
LOAE		: 220 mg/kę	3
	cation Route sure time	: Oral : 86 Days	
Rema			cant adverse effects were reported
2,6-D Spec	vi-tert-butyl-p-cresol:	: Rat	
NOA		: 25 mg/kg	
-	cation Route	: Ingestion	
Expo	sure time	: 22 Months	5
Asnii	ration toxicity		
-	lassified based on ava	ailable informatior).
Expe	rience with human e	exposure	
Com	ponents:		
altrei	nogest:		
Inhala	-	: Symptom	s: respiratory tract irritation
Skin -	contact	· Symptom	s: Skin irritation
Eye o	contact	: Symptom	s: Eye irritation
2. ECOL	OGICAL INFORMAT	ION	
Ecot	oxicity		
•	nononto.		

Components:

altrenogest:

Toxicity to fish (Chronic tox- icity)	:	NOEC (Danio rerio (zebra fish)): 0.0004 µg/l Exposure time: 32 d
iony)		Method: OECD Test Guideline 210



rsion .1	Revision Date: 2024/09/28		0S Number: 1674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02	
M-Fac toxicit	ctor (Chronic aquatic	:	100,000		
	-tert-butyl-p-cresol:				
	Toxicity to fish		LC50 (Danio rerio (zebra fish)): > 0.57 mg/l Exposure time: 96 h Method: Directive 67/548/EEC, Annex V, C.1.		
	Toxicity to daphnia and other aquatic invertebrates		EC50 (Daphnia magna (Water flea)): 0.48 mg/l Exposure time: 48 h Method: OECD Test Guideline 202		
	Toxicity to algae/aquatic plants		uatic : ErC50 (Pseudokirchneriella subcapitata (green mg/l Exposure time: 72 h Method: OECD Test Guideline 201		
			NOEC (Pseudoki mg/l Exposure time: 72 Method: OECD T		
	ctor (Acute aquatic tox-	:	1		
icity) Toxici icity)	ty to fish (Chronic tox-	:	NOEC (Oryzias la Exposure time: 30 Method: OECD T		
aquat	ty to daphnia and other ic invertebrates (Chron-	:	NOEC (Daphnia r Exposure time: 2 ²	nagna (Water flea)): 0.316 mg/l I d	
	ctor (Chronic aquatic	:	1		
	toxicity) Toxicity to microorganisms		EC50: > 10,000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209		
Persi	stence and degradabili	ity			
Comp	oonents:				
	i -tert-butyl-p-cresol: gradability		Result: Not readil	v biodegradable	
Diode	gradability	•	Biodegradation: 4 Exposure time: 28	4.5 %	





ersion 1.1	Revision Date: 2024/09/28	SDS Number: 641674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
Bioac	cumulative potential		
<u>Comp</u>	onents:		
Soya	oil:		
	on coefficient: n- bl/water	: log Pow: > 4 Remarks: Ca	
altren	ogest:		
	on coefficient: n- bl/water	: log Pow: 3.7	8
2,6-Di	-tert-butyl-p-cresol:		
Bioaco	cumulation		orinus carpio (Carp) ation factor (BCF): 330 - 1,800
	on coefficient: n- bl/water	: log Pow: 5.1	
Mobili	ity in soil		
<u>Comp</u>	onents:		
Distrib	ogest: ution among environ- l compartments	: log Koc: 3.3	
Hazar	dous to the ozone la	yer	
	adverse effects ta available		
3. DISPO	SAL CONSIDERATIO	NS	
Dispo	sal methods		
-	from residues		accordance with local regulations.
Conta	minated packaging	: Empty conta dling site for	se of waste into sewer. iners should be taken to an approved waste ha recycling or disposal. ise specified: Dispose of as unused product.
4. TRANS	PORT INFORMATIO	N	
Intern	ational Regulations		
UNRT			
	mber	: UN 3082	ENTALLY HAZARDOUS SUBSTANCE, LIQUIE
UN nu	r shipping name	N.O.S. (altrenogest	





Number

64

Altrenogest (0.4%) Formulation

Version 11.1	Revision Date: 2024/09/28		9S Number: 1674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
Labels	ng group nmentally hazardous	: : :	III 9 yes	
IATA-DGR UN/ID No. Proper shipping name		:	UN 3082 Environmentally h (altrenogest)	azardous substance, liquid, n.o.s.
Class Packing group Labels Packing instruction (cargo		::	9 III Miscellaneous 964	
ger air	ig instruction (passen-	:	964 ves	
IMDG- UN nu	Code	:	UN 3082 ENVIRONMENTA N.O.S.	ALLY HAZARDOUS SUBSTANCE, LIQUID,
Labels EmS C		:	(altrenogest) 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.

National Regulations

Refer to section 15 for specific national regulation.

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.

EDC	Code	
LIVO	COUE	•

15. REGULATORY INFORMATION

Related Regulations

Fire Service Law

Not applicable to dangerous materials / designated flammables.

171

Chemical Substance Control Law

Priority Assessment Chemical Substance

Chemical name

2,6-Di-tert-butyl-4-methylphenol



ersion 1.1	Revision Date: 2024/09/28	SDS Number: 641674-00027	Date of last issue: 2024/07/06 Date of first issue: 2016/05/02
Indus	strial Safety and Hea	alth Law	
	ful Substances Pro pplicable	hibited from Manufac	sture
		uired Permission for	Manufacture
Not a	pplicable		
	tances Prevented F pplicable	rom Impairment of He	ealth
on Ex	lar concerning Info disting Chemicals have pplicable		s having Mutagenicity - Annex 2: Information
on No		rmation on Chemicals naving Mutagenicity	s having Mutagenicity - Annex 1: Informat
	tances Subject to b pplicable	e Notified Names	
	tances Subject to b pplicable	e Indicated Names	
	and Eye Damage Su pplicable	ibstances for PPE Re	equirements (ISHL MO Art. 594-2)
tions	-	s (Article 577-2 of the	e Occupational Health and Safety Regula-
	nance on Preventior	of Hazards Due to S	pecified Chemical Substances
	nance on Preventior	of Lead Poisoning	
	nance on Preventior	n of Tetraalkyl Lead P	oisoning
	nance on Preventior	of Organic Solvent I	Poisoning
Subs	cement Order of the tances) pplicable	e Industrial Safety an	d Health Law - Attached table 1 (Dangerou
	onous and Deleterio	us Substances Contr	rol Law
viron			s of Specific Chemical Substances in the E the Management Thereof





Version	Revision Date:	SDS Number:	Date of last issue: 2024/07/06
11.1	2024/09/28	641674-00027	Date of first issue: 2016/05/02

High Pressure Gas Safety Act

Not applicable

Explosive Control Law

Not applicable

Vessel Safety Law

Miscellaneous dangerous substances and articles (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

Aviation Law

Miscellaneous dangerous substances and articles (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

Marine Pollution and Sea Disaster Prevention etc Law

Bulk transportation	:	Noxious liquid substance(Category Y)
---------------------	---	--------------------------------------

Pack transportation : Classified as marine pollutant

Narcotics and Psychotropics Control Act

Narcotic or Psychotropic Raw Material (Export / Import Permission) Not applicable Specific Narcotic or Psychotropic Raw Material (Export / Import permission) Not applicable

Waste Disposal and Public Cleansing Law

Industrial waste

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

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

16. OTHER INFORMATION

Further information Sources of key data used to compile the Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/				
Date format	:	yyyy/mm/dd				
Full text of other abbreviations						
ACGIH JP ISHL OEL 577-2(2)	:	USA. ACGIH Threshold Limit Values (TLV) Concentration standard (Value set by the Minister of Health, Labour and Welfare stipulated under the Ministerial Ordinance Article 577-2(2))				
ACGIH / TWA JP ISHL OEL 577-2(2) / 8h-	:	8-hour, time-weighted average 8-hour Occupational Exposure Limit-Mean				



Version	Revision Date:	SDS Number:
11.1	2024/09/28	641674-00027

Date of last issue: 2024/07/06 Date of first issue: 2016/05/02

OEL-M

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 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

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.

JP / EN