

Version 4.0	Revision Date: 06.04.2024		S Number: 32057-00015	Date of last issue: 30.09.2023 Date of first issue: 06.06.2017
Section 1	: Identification			
Prod	uct identifier	:	Amitraz Solid Fo	ormulation
Reco	mmended use of the c	hem	ical and restrict	ions on use
Reco	mmended use	:	Veterinary prod	uct
Restr	ictions on use	:	Not applicable	
Manu	facturer or supplier's o	detai	ls	
Comp	bany	:	MSD	
Addre	ess	:	50 Tuas West D Singapore - Sir	Drive ngapore 638408
Telep	hone	:	+1-908-740-400	00
Emer	gency telephone numbe	r :	65 6697 2111 (2	24/7/365)
E-ma	il address	:	EHSDATASTE	WARD@msd.com
Section 2	: Hazard identification			

Classification of the substance or mixtureAcute toxicity (Oral): Category 4						
Serious eye damage/eye irri- tation	:	Category 1				
Skin sensitisation	:	Category 1				
Germ cell mutagenicity	:	Category 2				
Carcinogenicity	:	Category 1B				
Specific target organ toxicity - repeated exposure	:	Category 2 (Liver, Central nervous system)				
Short-term (acute) aquatic hazard	:	Category 1				
Long-term (chronic) aquatic hazard	:	Category 1				

GHS Label elements, including precautionary statements



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Haza	rd pictograms		
Signa	ll word	: Danger	• • •
Haza	rd statements	H318 Causes H341 Suspecte H350 May cau H373 May cau system) throug	se an allergic skin reaction. serious eye damage. ed of causing genetic defects.
Preca	autionary statements	P202 Do not h and understoo P260 Do not b P264 Wash sk P270 Do not e P272 Contamin the workplace. P273 Avoid rel P280 Wear pro	reathe dust. in thoroughly after handling. at, drink or smoke when using this product. nated work clothing should not be allowed ou
		CENTER/ doct P302 + P352 I P305 + P351 + water for sever and easy to do CENTER/ doct P308 + P313 I attention. P333 + P313 I vice/ attention.	F exposed or concerned: Get medical advice f skin irritation or rash occurs: Get medical ac Fake off contaminated clothing and wash it be
		Storage: P405 Store loc	
		Disposal:	of contents/ container to an approved waste



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Additional Labelling

The following percentage of the mixture consists of ingredient(s) with unknown acute oral toxicity: 10 %

The following percentage of the mixture consists of ingredient(s) with unknown acute dermal toxicity: 10 %

The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 10 %

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 10 %

Other hazards which do not result in classification

May form explosive dust-air mixture during processing, handling or other means.

Section 3: Composition/information on ingredients

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
amitraz (ISO)	33089-61-1	50
Aluminium silicate	12141-46-7	>= 10 -<= 20
Calcium carbonate	471-34-1	>= 10 -<= 20
Paraformaldehyde	30525-89-4	2.55
Sodium bis(2-ethylhexyl)sulfosuccinate	577-11-7	1

Section 4: First-aid measures

Description of necessary 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 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	:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
		If easy to do, remove contact lens, if worn.
If owned		Get medical attention immediately.
If swallowed	•	If swallowed, DO NOT induce vomiting. Get medical attention.
		Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.
		Never give anything by mouth to an unconscious person.
Most important symptoms ar	nd	effects, both acute and delayed
Risks	:	Harmful if swallowed.
		May cause an allergic skin reaction.



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			May cause can	ausing genetic defects.
Proteo	ction of first-aiders	:	and use the rec	ders should pay attention to self-protection ommended personal protective equipment tial for exposure exists (see section 8).
	•	me		and special treatment needed
Treatr	nent		Treat symptoma	atically and supportively.
ection 5:	Fire-fighting measure	S		
Exting	uishing media			
Suitab	le extinguishing media	:	Water spray Alcohol-resistar Carbon dioxide Dry chemical	
Unsui media	table extinguishing	:	None known.	
Speci	al hazards arising from	n th	e substance or	mixture
Specil fightin	fic hazards during fire- g	:	concentrations, potential dust e	g dust; fine dust dispersed in air in sufficien and in the presence of an ignition source is xplosion hazard. mbustion products may be a hazard to healt
Hazar	dous combustion prod-	:	Carbon oxides	
ucts			Silicon oxides Metal oxides	
			Nitrogen oxides Sulphur oxides	(NOx)
Speci	al protective actions for	or fi	re-fighters	
for fire	al protective equipment fighters fic extinguishing meth-	:	Use personal p	ire, wear self-contained breathing apparatu rotective equipment. ng measures that are appropriate to local ci
ods			cumstances and Use water spray	d the surrounding environment. y to cool unopened containers. laged containers from fire area if it is safe to
			Evacuate area.	

Follow safe handling advice (see section 7) and personal pro tective equipment recommendations (see section 8).	Personal precautions		Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).
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Environmental precautions



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Envir	onmental precautions	Prevent further Retain and disp	o the environment. leakage or spillage if safe to do so. ose of contaminated wash water. s should be advised if significant spillages ined.
	and materials for cont ods for cleaning up	: Sweep up or va tainer for dispos Avoid dispersal with compresse Dust deposits sl es, as these ma leased into the a Local or nationa posal of this ma employed in the mine which regu Sections 13 and	cuum up spillage and collect in suitable con- al. of dust in the air (i.e., clearing dust surfaces

Section 7: Handling and storage

Precautions for safe handli	ng	
Technical measures	:	Static electricity may accumulate and ignite suspended dust causing an explosion. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
Local/Total ventilation	:	If sufficient ventilation is unavailable, use with local exhaust ventilation.
Advice on safe handling	:	Do not get on skin or clothing. Do not breathe dust. Do not swallow. Do not get in eyes. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as- sessment Keep container tightly closed. Keep away from water. Protect from moisture. Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product.
Hygiene measures	:	Take care to prevent spills, waste and minimize release to the environment. If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.



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	When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of th workplace. Wash contaminated clothing before re-use.					
Cond	itions for safe storage	, includi	ng any incor	npatibilities		
			re locked up. op tightly close re in accorda	nce with the particular national regulations. the following product types:		

Section 8: Exposure controls/personal protection

Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
amitraz (ISO)	33089-61-1	TWA	10 µg/m3 (OEB 3)	Internal
		Wipe limit	1250 µg/100 cm ²	Internal
Aluminium silicate	12141-46-7	TWA (Res- pirable par- ticulate mat- ter)	1 mg/m3 (Aluminium)	ACGIH
Calcium carbonate	471-34-1	PEL (long term)	10 mg/m3 (Calcium car- bonate)	SG OEL

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Formaldehyde	50-00-0	PEL (short term)	0.3 ppm 0.37 mg/m3	SG OEL
		TWA	0.1 ppm	ACGIH
		STEL	0.3 ppm	ACGIH

Appropriate engineering control measures

: Processing may form hazardous compounds (see section 10).

Minimize workplace exposure concentrations.

Apply measures to prevent dust explosions.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). If sufficient ventilation is unavailable, use with local exhaust



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ventilation.

Individual protection measures	s, such as personal protective equipment (PPE)
Eye/face protection :	Wear the following personal protective equipment: Chemical resistant goggles must be worn. If splashes are likely to occur, wear: Face-shield
Skin protection :	resistance data and an assessment of the local exposure potential.
	Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Respiratory protection :	
Filter type : Hand protection	Combined particulates and inorganic gas/vapour type
Material :	Chemical-resistant gloves
Remarks :	Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous sub- stance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Section 9: Physical and chemical properties

Appearance	:	powder
Colour	:	white
Odour	:	No data available
Odour 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	:	No data available
Flammability (solid, gas)	:	May form explosive dust-air mixture during processing, han- dling or other means.



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Flam	mability (liquids)	:	No data available	e
	Upper explosion limit / Upper flammability limit		No data available	e
	r explosion limit / Lower nability limit	:	No data available	e
Vapo	ur pressure	:	No data available	e
Relat	ive vapour density	:	No data available	e
Relat	ive density	:	No data available	e
Dens	ity	:	No data available	e
	bility(ies) ater solubility	:	insoluble	
	ion coefficient: n-	:	No data available	e
	ol/water ignition temperature	:	No data available	e
Deco	mposition temperature	:	No data available	e
Visco Vi	sity scosity, kinematic	:	No data available	e
Explo	osive properties	:	Not explosive	
Oxidi	zing properties	:	The substance o	r mixture is not classified as oxidizing.
Mole	cular weight	:	Not applicable	
	cle characteristics cle size	:	No data available	e

Section 10: Stability and reactivity

Reactivity Chemical stability Possibility of hazardous reac- tions	: :	Not classified as a reactivity hazard. Stable under normal conditions. May form explosive dust-air mixture during processing, han- dling or other means. Can react with strong oxidizing agents. Hazardous decomposition products will be formed upon con- tact with water or humid air.
Conditions to avoid	:	Exposure to moisture Heat, flames and sparks.



ersio)	on	Revision Date: 06.04.2024		S Number: 32057-00015	Date of last issue: 30.09.2023 Date of first issue: 06.06.2017		
Ir	ncomp	atible materials	:	Avoid dust forma Oxidizing agents Water	tion.		
	Contac	lous decomposition p t with water or humid					
ctic	on 11:	Toxicological inform	atic	n			
	nforma exposu	ation on likely routes of re	:	Inhalation Skin contact Ingestion Eye contact			
Н	larmfu	toxicity Il if swallowed.					
	Produc Acute c	<u>zt:</u> oral toxicity	:	Acute toxicity estimate: 958.7 mg/kg Method: Calculation method			
A	Acute in	nhalation toxicity	:	Acute toxicity estimate: > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method			
<u>C</u>	Compo	onents:					
		z (ISO):			<i>"</i>		
	cute c	oral toxicity	:	LD50 (Rat): > 400) mg/kg		
Н				LD50 (Mouse): >	1,085 mg/kg		
				LD50 (Guinea pig): > 400 mg/kg		
А	cute in	nhalation toxicity	:	Remarks: No data	a available		
А	cute c	lermal toxicity	:	LD50 (Rat): > 1,6	00 mg/kg		
	lumin	nium silicate:					
A	Acute c	pral toxicity	:	LD50 (Rat): > 2,000 mg/kg Assessment: The substance or mixture has no acute oral tox- icity			
A	Acute in	nhalation toxicity	:	LC50 (Rat): > 2.18 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhala- tion toxicity			



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Acute	e dermal toxicity	: LD50 (Rat): > 5,000 mg/kg		
Calci	um carbonate:				
Acute	oral toxicity	Metho	Rat): > 2,000 mg/kg : OECD Test Guidelin ment: The substance	e 420 or mixture has no acute oral to	
Acute	inhalation toxicity	Expos Test a Metho		e 403 or mixture has no acute inhala-	
Acute	e dermal toxicity	Metho	Rat): > 2,000 mg/kg : OECD Test Guidelin ment: The substance	e 402 or mixture has no acute dermal	
Paraf	ormaldehyde:				
Acute	oral toxicity	: LD50 (LD50 (Rat, male): 592 mg/kg		
Acute	inhalation toxicity	Expos	LC50 (Rat): 1.07 mg/l Exposure time: 4 h Test atmosphere: dust/mist		
Acute	e dermal toxicity	: LD50 (Rat): > 10,000 mg/kg		
II Sodiı	ım bis(2-ethylhexyl)	sulfosuccinat	:		
Acute	oral toxicity	: LD50 (Rat): 3,080 mg/kg		
Acute	e dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg)	
Not cl	corrosion/irritation lassified based on ava	ailable informa	on.		
	oonents:				
Speci	az (ISO): es	: Rabbit			
Resu			irritation		
Alum	inium silicate:				
Speci		: Rabbit			
Resul Rema		: No skin irritation : Based on data from similar materials			
L'ems	1179	. Daseu	on uala num Similar m	101011015	



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Calci	um carbonate:		
Spec		: Rabbit	
Meth		: OECD Test Gui	deline 404
Resu		: No skin irritation	
Parat	formaldehyde:		
Spec		: Rabbit	
Resu	lt	: Skin irritation	
	um bis(2-ethylhexyl)		
Spec		: Rabbit	deline 404
Meth Resu		: OECD Test Gui	aeiine 404
	ous eye damage/eye es serious eye damag		
	ponents:	J O.	
amitr	az (ISO):		
Spec		: Rabbit	
Resu	lt	: No eye irritation	
Alum	iinium silicate:		
Spec	ies	: Rabbit	
Resu	lt	: No eye irritation	I Contraction of the second
Meth		: OPPTS 870.240	
Rema	arks	: Based on data f	rom similar materials
	um carbonate:		
Spec		: Rabbit	
Resu Meth		: No eye irritation : OECD Test Gui	
Parat	formaldehyde:		
Spec	-	: Rabbit	
Resu		: Irreversible effe	cts on the eye
Sodi	um bis(2-ethylhexyl)	sulfosuccinate:	
Spec		: Rabbit	
Resu	lt	: Irreversible effe	
Meth	od	: OECD Test Gui	deline 405
Resp	iratory or skin sens	itisation	
	sensitisation		



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-	piratory sensitisation		
	lassified based on av	ailable information.	
	ponents:		
	raz (ISO):	Maximiantian	Test
Test	sure routes	: Maximisation : Dermal	lest
Spec		: Guinea pig	
Resu		: Not a skin se	nsitizer.
Alum	ninium silicate:		
Test	Туре	: Local lymph r	node assay (LLNA)
Expo	sure routes	: Skin contact	
Spec		: Mouse	
Resu	llt	: negative	
Calci	ium carbonate:		
Test			node assay (LLNA)
	sure routes	: Skin contact	
Spec Meth		: Mouse : OECD Test 0	Luideline 420
Resu		: negative	
Para	formaldehyde:		
Test		: Local lymph r	node assay (LLNA)
	sure routes	: Skin contact	
Spec	ies	: Mouse	
Resu		: positive	* • • • • • • •
Rema		: Based on dat	a from similar materials
Asse	ssment	: Probability or mans	evidence of high skin sensitisation rate in h
Sodi	um bis(2-ethylhexyl)	sulfosuccinate:	
Test	Туре		t insult patch test (HRIPT)
Expo	sure routes	: Skin contact	/
Spec		: Humans	
Resu	llt	: negative	
	n cell mutagenicity		
Susp	ected of causing gen	etic defects.	
<u>Com</u>	ponents:		

amitraz (ISO):

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



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		Test Type: In v Result: negativ	itro mammalian cell gene mutation test e
		Test Type: Chr Result: negativ	romosome aberration test in vitro
			A damage and repair, unscheduled DNA syr nalian cells (in vitro) re
Alum	inium silicate:		
Geno	toxicity in vitro	: Test Type: Bac Result: negativ	cterial reverse mutation assay (AMES) re
		Test Type: In v Result: negativ	ritro mammalian cell gene mutation test re
		Result: negativ	romosome aberration test in vitro re ed on data from similar materials
Geno	toxicity in vivo	cytogenetic tes Species: Rat Application Ro Result: negativ	
Calci	um carbonate:		
Geno	toxicity in vitro		cterial reverse mutation assay (AMES)) Test Guideline 471 re
			romosome aberration test in vitro) Test Guideline 473 re
			ritro mammalian cell gene mutation test D Test Guideline 476 re
Paraf	ormaldehyde:		
	toxicity in vitro	Result: positive	cterial reverse mutation assay (AMES) e ed on data from similar materials
		Result: positive	itro mammalian cell gene mutation test e ed on data from similar materials



sion	Revision Date: 06.04.2024	SDS Number: 1732057-00015	Date of last issue: 30.09.2023 Date of first issue: 06.06.2017
		Result: positive Remarks: Base Test Type: DN/ thesis in mamm Result: positive Remarks: Base	d on data from similar materials A damage and repair, unscheduled DNA syr nalian cells (in vitro) d on data from similar materials tro sister chromatid exchange assay in man
Geno	otoxicity in vivo	Remarks: Base : Test Type: Mar cytogenetic ass	d on data from similar materials nmalian erythrocyte micronucleus test (in viv
		Result: positive	ite: inhalation (vapour) d on data from similar materials
		cytogenetic ass Species: Rat Application Rou Result: positive	
	n cell mutagenicity - ssment	: Positive result(genicity tests.	s) from in vivo mammalian somatic cell muta
Sodi	um bis(2-ethylhexyl)	sulfosuccinate:	
Geno	otoxicity in vitro		terial reverse mutation assay (AMES) Test Guideline 471 e
			omosome aberration test in vitro Test Guideline 473 al
		Method: OECD Result: negative	tro mammalian cell gene mutation test Test Guideline 476 e d on data from similar materials

May cause cancer.



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Com	oonents:		
Speci	az (ISO):	: Rat	
	cation Route	: Oral	
Expos	sure time	: 2 Years	
NÓAE	EL	: > 10.18 mg/	/kg body weight
Resul	lt	: negative	
Speci	es	: Mouse	
	sure time	: 2 Years	
LOAE		: 2.3 mg/kg b	ody weight
Resul		: positive	aab
Targe	et Organs	: Liver, Stoma	ach
Alum	inium silicate:		
Speci		: Rat	
Applic	cation Route	: Ingestion	
	sure time	: 104 weeks	
Resul		: negative	ata fram aimilar matariala
Rema	arks	: Based on da	ata from similar materials
Paraf	ormaldehyde:		
Speci	es	: Rat	
	cation Route	: Ingestion	
	sure time	: 105 weeks	
Resul	I	: negative	
Speci		: Rat	
	cation Route	: Inhalation	
	sure time	: 28 Months	
Resul Rema		: positive : Based on da	ata from similar materials
ment	nogenicity - Assess-	: Sufficient ev	vidence of carcinogenicity in animal experiments
Repro	oductive toxicity		
Not cl	assified based on avai	lable information.	
Comp	oonents:		
amitra	az (ISO):		
Effect	s on fertility		Three-generation reproduction toxicity study
		Species: Ra	
		Application	
			AEL: > 4.8 mg/kg body weight significant adverse effects were reported
Effect	s on foetal develop-	: Test Type: I	Embryo-foetal development
ment		Species: Ra	
		Application	



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				Toxicity: NOAEL: 3 mg/kg body weight ignificant adverse effects were reported
			Test Type: Eml Species: Rabbi	oryo-foetal development
			Application Rou Developmental	
Alumi	nium silicate:			
Effects ment	on foetal develop-	:	Species: Rat Application Rou	
			Result: negativ Remarks: Base	e ed on data from similar materials
l l Calciu	m carbonate:			
	on fertility	:	reproduction/de Species: Rat Application Rou	Test Guideline 422
Effects ment	on foetal develop-	:	Species: Rat Application Rou	Test Guideline 414
Sodiui	m bis(2-ethylhexyl)s	ulfos	uccinate:	
	s on fertility	:		
Effects ment	on foetal develop-	:	Test Type: Eml Species: Rat Application Rou Result: negativ	
Not cla	 single exposure assified based on avai onents: 	lable	information.	
-	ormaldehyde:			
	sment		May cause res	piratory irritation.



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	- repeated exposur		
May c posur		ans (Liver, Central nerv	ous system) through prolonged or repeated
Com	oonents:		
amitr	az (ISO):		
	et Organs	: Liver, Central n	ervous system
Asses	ssment		nage to organs through prolonged or repeate
11		exposure.	
Repe	ated dose toxicity		
Comp	oonents:		
amitr	az (ISO):		
Speci		: Mouse	
NOAE		: 3 mg/kg : Oral	
	cation Route sure time	: 90 Days	
Targe	et Organs	: Liver	
Speci	es	: Dog	
NOAE		: 0.25 mg/kg	
Applic	cation Route	: Oral	
Expos	sure time et Organs	: 90 Days : Central nervous	s system Liver
H ange	a organo		
	inium silicate:		
Speci	es	: Rat	
NOAE	L Sation Route	: > 100 mg/kg : Ingestion	
Expos	cation Route sure time	: 104 Weeks	
Rema		: Based on data	from similar materials
Calci	um carbonate:		
Speci	es	: Rat	
NOA	EL	: > 1,000 mg/kg	
Applic	cation Route sure time	: Ingestion	
Expos Metho	sure time	: 28 Days : OECD Test Gu	ideline 422
ivietric	Ju	. DECD Test Gu	
Paraf	ormaldehyde:		
Speci		: Rat, male	
NOAE		: 15 mg/kg	
Applic	cation Route sure time	: Ingestion : 105 Weeks	
	arks	. TOO WEEKS	from similar materials



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Sodium bis(2-ethylhexyl)sulfosuccinate:

Species NOAEL Application Route Exposure time	: Rat
NOAEL	: 750 mg/kg
Application Route	: Ingestion
Exposure time	: 90 Days

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

amitraz (ISO):

Ingestion

: Target Organs: Central nervous system

Section 12: Ecological information

Toxicity

Components:

amitraz (ISO):

amiti'az (100).		
Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.45 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.035 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	NOEC (Pseudokirchneriella subcapitata (green algae)): 0.04 mg/l Exposure time: 91 h
M-Factor (Acute aquatic tox-	:	10
icity) Toxicity to fish (Chronic tox- icity)	:	NOEC (Pimephales promelas (fathead minnow)): 0.00148 mg/l Exposure time: 32 d
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.0011 mg/l Exposure time: 21 d
M-Factor (Chronic aquatic toxicity)	:	10
Aluminium silicate:		
Ecotoxicology Assessment Chronic aquatic toxicity	:	No toxicity at the limit of solubility
Calcium carbonate:	:	LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l



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				o n Water Accommodated Fraction est Guideline 203
	ty to daphnia and other c invertebrates	:	Exposure time: 4 Test substance: \	agna (Water flea)): > 100 mg/l 8 h Vater Accommodated Fraction est Guideline 202
Toxici plants	ty to algae/aquatic	:	mg/l Exposure time: 7 Test substance: \	kirchneriella subcapitata (green algae)): 50 2 h Water Accommodated Fraction est Guideline 201
			mg/l Exposure time: 7 Test substance: 1	chneriella subcapitata (green algae)): > 10 2 h Vater Accommodated Fraction est Guideline 201
Toxici	ty to microorganisms	:	NOEC: 1,000 mg Exposure time: 3 Method: OECD T	
			EC50: > 1,000 m Exposure time: 3 Method: OECD T	
Parafe	ormaldehyde:			
Toxici	ty to fish	:	LC50 : > 1 mg/l Exposure time: 9 Remarks: Based	6 h on data from similar materials
	ty to daphnia and other c invertebrates	:	Exposure time: 4 Method: OECD T	ulex (Water flea)): > 1 mg/l 8 h est Guideline 202 on data from similar materials
Toxici plants	ty to algae/aquatic	:	Exposure time: 7 Method: OECD T	smus subspicatus (green algae)): > 1 mg/ 2 h est Guideline 201 on data from similar materials
Toxici icity)	ty to fish (Chronic tox-	:	Exposure time: 2	atipes (Orange-red killifish)): > 1 mg/l 8 d on data from similar materials
	ty to daphnia and other ic invertebrates (Chron- city)	:	Exposure time: 2 Method: OECD T	magna (Water flea)): > 1 mg/l 1 d est Guideline 211 on data from similar materials



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Toxici	ty to microorganisms	:		h est Guideline 209 on data from similar materials
Sodiu	ım bis(2-ethylhexyl)su	lfos	uccinate:	
Toxici	ty to fish	:	Exposure time: 9	o (zebra fish)): 49 mg/l 6 h e 67/548/EEC, Annex V, C.1.
	ty to daphnia and other ic invertebrates	:	EC50 (Daphnia r Exposure time: 4	nagna (Water flea)): 6.6 mg/l 8 h
Toxici plants	ty to algae/aquatic	:	ErC50 (Desmode Exposure time: 7	esmus subspicatus (green algae)): 82.5 mg 2 h
			EC10 (Desmode Exposure time: 7	smus subspicatus (green algae)): 22 mg/l 2 h
	ty to daphnia and other ic invertebrates (Chron- city)		Exposure time: 2	nagna (Water flea)): 9 mg/l 1 d Test Guideline 211
Toxici	ty to microorganisms	:	EC50 (Pseudome Exposure time: 1	onas putida): 164 mg/l 6 h
Persis	stence and degradabil	ity		
Comp	oonents:	-		
Parafe	ormaldehyde:			
Biode	gradability	:	Result: Readily b Remarks: Based	iodegradable. on data from similar materials
Sodiu	m bis(2-ethylhexyl)su	lfos	uccinate:	
Biode	gradability	:	Result: Readily b Biodegradation: Exposure time: 2	91.2 %
Bioac	cumulative potential			
<u>Comp</u>	oonents:			
amitra	az (ISO):			
Bioac	cumulation	:		s macrochirus (Bluegill sunfish) factor (BCF): 1,333
Dioact			DIOCONCENTRATION	



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Parat	ormaldehyde:			
	ion coefficient: n- ol/water	:	log Pow: -1.40 Remarks: Calcul	ation
Sodiu	um bis(2-ethylhexyl)sı	ulfos	succinate:	
	ion coefficient: n- ol/water	:	log Pow: 1.998 Remarks: Calcul	ation
Mobi	lity in soil			
Com	ponents:			
amitr	az (ISO):			
Distri menta	bution among environ- al compartments	:	log Koc: 3.3	
Othe	r adverse effects			
No da	ata available			
Wast Conta	osal methods e from residues aminated packaging	:	Dispose of in acc Empty containers dling site for recy	of waste into sewer. cordance with local regulations. s should be taken to an approved waste han /cling or disposal. specified: Dispose of as unused product.
Section 1	4: Transport informati	on		
Interi	national Regulations			
UNR	TDG			
	umber roper shipping name	:	UN 3077 ENVIRONMENT N.O.S. (amitraz (ISO))	ALLY HAZARDOUS SUBSTANCE, SOLID,
	sport hazard class(es) ng group s	:	9 9	
Envir	onmental hazards	:	yes	
	-DGR	_		
UN/IE UN p	roper shipping name	:		hazardous substance, solid, n.o.s.
Packi Label	ng instruction (cargo	:	(amitraz (ISO)) 9 III Miscellaneous 956	



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gera	king instruction (passen- aircraft) ironmentally hazardous	: 956 : yes	
IMD UN	G-Code number per shipping name	: UN 3077	IENTALLY HAZARDOUS SUBSTANCE, SOLID,
Pack Labe EmS	nsport hazard class(es) king group els S Code ine pollutant	N.O.S. (amitraz (IS : 9 : III : 9 : F-A, S-F	O))
Trar	nsport in bulk according		nents

Not applicable for product as supplied.

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

Safety, health and environmental regulations specific for the product in question

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.

Environmental Protection and Management Act and Environmental Protection and Management (Hazard- ous Substances) Regulations	:	Amitraz
Fire Safety (Petroleum and Flammable Materials) Regulations	:	Not applicable

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

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

Section 16: Other information

Revision Date	:	06.04.2024
Further information		
Sources of key data used to compile the Safety Data	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-



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She	et		cy, http://echa.eu	ropa.eu/
Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.				
Dat	e format	:	dd.mm.yyyy	
Ful	text of other abbreviat	ions		
AC SG	GIH OEL	:	USA. ACGIH Threshold Limit Values (TLV) Singapore. Workplace Safety and Health (General Provisions) Regulations - First Schedule Permissible Exposure Limits of Toxic Substances.	
AC	GIH / TWA GIH / STEL OEL / PEL (long term)	:	8-hour, time-weig Short-term expos Permissible Expo	

EL / PEL (long term)	:	Permissible Exposure Level (PEL) Long Term
EL / DEL (chart tarm)		Dermissible Experies Level (DEL) Short Term

SG OEL / PEL (short term) : Permissible Exposure Level (PEL) Short Term

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



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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.

SG / EN