

Mianserin Formulation

Version 2.2	Revision Date: 13.09.2019		S Number: 09327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017
SECTION	N 1. PRODUCT AND CO	MPA	NY IDENTIFICAT	ION
Prod	luct name	:	Mianserin Formu	ulation
Man	ufacturer or supplier's (deta	ils	
	ipany	:	Organon & Co.	
Addr	ess	:	30 Hudson Stree Jersey City, New	et, 33nd floor v Jersey, U.S.A 07302
Tele	phone	:	551-430-6000	
Eme	rgency telephone	:	215-631-6999	
E-ma	ail address	:	EHSSTEWARD	@organon.com
	Recommended use of the che Recommended use		iical and restriction Pharmaceutical	ons on use
SECTION	N 2. HAZARDS IDENTIFI	CAT	ION	
GHS	Classification			
Repi	roductive toxicity	:	Category 2	
	cific target organ toxicity - e exposure	- :	Category 1 (Cen	tral nervous system)
GHS	abel elements			
Haza	ard pictograms	:		
Sign	al Word	:	Danger	
Haza	ard Statements	:	damaging the ur	ed of damaging fertility. Suspected of born child. amage to organs (Central nervous system).
Prec	autionary Statements	:	P202 Do not har and understood. P260 Do not bre P264 Wash skin P270 Do not eat	athe dust. thoroughly after handling. , drink or smoke when using this product. ective gloves/ protective clothing/ eye protec-

Response:



Mianserin Formulation

Version 2.2	Revision Date: 13.09.2019	SDS Number: 1609327-00006		sue: 24.04.2019 sue: 01.05.2017			
		P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.					
		Storage: P405 Store lo	Storage: P405 Store locked up.				
	r hazards which do n known.	not result in classifica	ation				
SECTION	3. COMPOSITION/IN	FORMATION ON ING	REDIENTS				
Subs	tance / Mixture	: Mixture					
Com	ponents						
Chen	nical name		CAS-No.	Concentration (% w/w)			
mian	serin hydrochloride		21535-47-7	>= 10 -< 20			
Starc	h		9005-25-8	>= 10 -< 20			
	4. FIRST AID MEASU	: In the case of a advice immedi	ately.	eel unwell, seek medical cases of doubt seek medical			
lf inha	aled		 If inhaled, remove to fresh air. Get medical attention. 				

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.
		Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
delayed		Causes damage to organs.
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



Mianserin Formulation

ersion .2	Revision Date: 13.09.2019		OS Number: 09327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017	
			Alcohol-resistant Carbon dioxide (C Dry chemical		
Unsuitable extinguishing media		:	None known.		
Specifi fighting	Specific hazards during fire		Exposure to combustion products may be a hazard to health.		
Hazaro ucts	dous combustion prod-	:	Carbon oxides Metal oxides Oxides of phosph Silicon oxides	orus	
Specifi ods	ic extinguishing meth-	:	cumstances and t Use water spray t	measures that are appropriate to local cir- the surrounding environment. o cool unopened containers. ged containers from fire area if it is safe to do	
•	al protective equipment -fighters	:		e, wear self-contained breathing apparatus. tective equipment.	

Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions	:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. 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	:	Sweep up or vacuum up spillage and collect in suitable container for disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation Advice on safe handling		Use only with adequate ventilation. 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



Mianserin Formulation

Version 2.2	Revision Date: 13.09.2019	SDS Number: 1609327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017
Cond	litions for safe storage	Store locked up	ly labeled containers. 5. lance with the particular national regulations.
Mate	rials to avoid		th the following product types: g agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
mianserin hydrochloride	21535-47-7	TWA	20 µg/m3 (OEB 3)	Internal
	Further informa	ation: Skin		
		Wipe limit	200 µg/100 cm ²	Internal
Starch	9005-25-8	CMP	10 mg/m ³	AR OEL
	Further informa	ation: A4 - Not c	lassifiable as a huma	n carcinogen:
			hat they could be card	
	humans but wh	nich cannot be a	ssessed conclusively	because of a
	lack of data. In vitro or animal studies do not provide indication			
	carcinogenicity which are sufficient to classify the agent into on			
	of the other cat	tegories., lung, D	Dermatitis	
		TWA	10 mg/m ³	ACGIH

Ingredients with workplace control parameters

Engineering measures :	Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.	
Personal protective equipmen	t	
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	Particulates type	
Material :	Chemical-resistant gloves	
Remarks :	Choose gloves to protect hands against chemicals depending on the concentration 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.	
Eye protection :	Wear the following personal protective equipment: Safety glasses	
Skin and body protection :	Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.	



Mianserin Formulation

ersion .2	Revision Date: 13.09.2019	-	S Number: 99327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017	
Hygiene measures		 Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc). If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. 			
ECTION 9	9. PHYSICAL AND CHE	EMIC		3	
Appea	rance	:	Crystalline solid		
Color		:	white to off-white		
Odor		:	No data available)	
Odor 1	Threshold	:	No data available		
pН	рН		No data available		
Melting	g point/freezing point	:	No data available		
	Initial boiling point and boiling		No data available	9	
range Flash point		:	Not applicable		
Evapo	Evaporation rate		No data available)	
Flamm	Flammability (solid, gas)		Not classified as	a flammability hazard	
Flamm	nability (liquids)	:	No data available)	
	explosion limit / Upper ability limit	:	No data available		
	explosion limit / Lower ability limit	:	No data available		
Vapor	pressure	:	No data available	9	
Relativ	Relative vapor density		No data available	9	
Relativ	ve density	:	No data available	9	
Densit	у	:	No data available)	
	lity(ies) ter solubility	:	No data available)	
	on coefficient: n-	:	No data available)	
	ol/water nition temperature	:	No data available)	
Decon	nposition temperature	:	No data available)	



Mianserin Formulation

Version 2.2	Revision Date: 13.09.2019		S Number: 09327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017
	Viscosity Viscosity, kinematic Explosive properties		No data available Not explosive	9
	Oxidizing properties Molecular weight		The substance o	r mixture is not classified as oxidizing.
Pa	Particle size		No data available	9
SECTIC	ON 10. STABILITY AND RE	EAC	ΤΙVITY	
Ch Pos tior Co Inc	Reactivity Chemical stability Possibility of hazardous reac- tions Conditions to avoid Incompatible materials Hazardous decomposition		Stable under nor Can react with st None known. Oxidizing agents	rong oxidizing agents.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : exposure	Skin contact Ingestion Eye contact
Acute toxicity	
Not classified based on available	information.
Product:	
Acute oral toxicity :	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
Components:	
mianserin hydrochloride:	
Acute oral toxicity :	LD50 (Rat): 780 mg/kg
	LD50 (Mouse): 224 mg/kg

Starch:

products

Acute oral toxicity	: LD50 (Mouse): > 5.000 mg/kg
---------------------	-------------------------------

Skin corrosion/irritation

Not classified based on available information.



Mianserin Formulation

/ersion 2.2	Revision Date: 13.09.2019	SDS Number: 1609327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017
<u>Com</u>	ponents:		
mian Rema	serin hydrochloride: arks	: Not classified of	due to lack of data.
	us eye damage/eye ir lassified based on avai		
Com	ponents:		
mian Rema	serin hydrochloride: arks	: Not classified of	due to lack of data.
Resp	iratory or skin sensit	ization	
•	sensitization lassified based on avai	lable information.	
Not c	iratory sensitization lassified based on avai	lable information.	
	ponents:		
Rema	serin hydrochloride: arks	: Not classified of	due to lack of data.
	n cell mutagenicity lassified based on avai	lable information.	
<u>Com</u>	ponents:		
	serin hydrochloride: toxicity in vitro	: Test Type: ger Result: positive	ne mutation test e
		Result: negativ	cterial reverse mutation assay (AMES) /e ed on data from similar materials
		Result: negativ	ter chromatid exchange assay /e ed on data from similar materials
		Result: negativ	vitro mammalian cell gene mutation test ve ed on data from similar materials
		Result: negativ	scheduled DNA synthesis assay /e ed on data from similar materials
Geno	toxicity in vivo	: Test Type: Mic Species: Rat Cell type: Bone Application Ro	e marrow



Mianserin Formulation

Version 2.2	Revision Date: 13.09.2019	-	0S Number: 09327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017
			Result: negative Remarks: Basec	l on data from similar materials
Not c	i nogenicity lassified based on availa	able	information.	
Com	ponents:			
mian Rema	serin hydrochloride: arks	:	Not classified du	e to lack of data.
Susp	oductive toxicity ected of damaging fertilit ponents:	ty. S	uspected of dama	aging the unborn child.
mian	serin hydrochloride:			
	ts on fertility	:		
Effect	ts on fetal development	:	Developmental 7	lopment e: Subcutaneous Foxicity: LOAEL: 10 mg/kg body weight n postnatal development.
				lopment Foxicity: LOAEL: 3 mg/kg body weight ethal effects., No teratogenic effects.
			Test Type: Deve Species: Rabbit Result: Reduced	lopment I fetal weight., No teratogenic effects.
				lopment Foxicity: NOAEL: 30 mg/kg body weight ts on fetal development.
Repro sessr	oductive toxicity - As- nent	:	Suspected of da unborn child.	maging fertility. Suspected of damaging the

STOT-single exposure

Causes damage to organs (Central nervous system).





Versior 2.2	n Revision Date: 13.09.2019	SDS Number: 1609327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017
<u>Cc</u>	omponents:		
Та	ianserin hydrochloride: arget Organs ssessment	: Central nervous : Causes damage	
	OT-repeated exposure ot classified based on availa	able information.	
Re	epeated dose toxicity		
<u>Cc</u>	omponents:		
Sp NC Ap Ex Re Sp LC Ap Ex	ianserin hydrochloride: pecies DAEL oplication Route coosure time emarks DAEL oplication Route coosure time ymptoms	 Rat 30 mg/kg Oral 6 Months No significant ad Dog 3 - 30 mg/kg Oral 6 Months Reduced body w 	verse effects were reported
No	spiration toxicity ot classified based on availa sperience with human exp		
	omponents:		
	ianserin hydrochloride: nalation		e harmful if inhaled. ion of respiratory tract.

	May cause irritation of respiratory tract.	
Skin contact	: Remarks: Can be absorbed through skin.	
	May irritate skin.	
Eye contact	: Remarks: May irritate eyes.	
Ingestion	: Symptoms: central nervous system effects, dry mouth, consti- pation, Headache, Tremors	-

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity No data available Persistence and degradability No data available **Bioaccumulative potential** Components: mianserin hydrochloride:





Version 2.2	Revision Date: 13.09.2019	SDS Number: 1609327-00006	Date of last issue: 24.04.2019 Date of first issue: 01.05.2017	
	ion coefficient: n- ol/water	: log Pow: 3,36		
	lity in soil ata available			
••	r adverse effects ata available			
SECTION	13. DISPOSAL CON	SIDERATIONS		
Disp	osal methods			

Waste from residues	:	Dispose of in accordance with local regulations.	
Contaminated packaging	:	Empty containers should be taken to an approved waste	
		handling site for recycling or disposal.	
		If not otherwise specified: Dispose of as unused product.	

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

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

Argentina. Carcinogenic Substances and Agents : Not applicable Registry.

Control of precursors and essential chemicals for the : Not applicable preparation of drugs.

International Regulations

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

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

Mianserin Formulation



Version	Revision Date:	SDS Number:	Date of last issue: 24.04.2019
2.2	13.09.2019	1609327-00006	Date of first issue: 01.05.2017

SECTION 16. OTHER INFORMATION

Further information

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/
Full text of other abbreviatio	ns	
ACGIH		USA. ACGIH Threshold Limit Values (TLV)
AR OEL		Argentina, Occupational Exposure Limits

AR OEL	:	Argentina. Occupational Exposure Limits
ACGIH / TWA AR OEL / CMP		8-hour, time-weighted average TLV (Threshold Limit Value)

AICS - Australian Inventory of Chemical Substances; 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; 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



Mianserin Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 24.04.2019
2.2	13.09.2019	1609327-00006	Date of first issue: 01.05.2017

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.

AR / Z8