

Safety Data Sheet per OSHA HazCom 2012

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Product name: Dynamphin A (1-13), porcine Strok number: 104015 Version 1040 Version 104015 Version 1040 Version 104015 Version 1040 Version 104015 Version 1040 V		
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See Section 7 for information on safe handling See Section 8 for information on personal protection equipment.	Prevention of secondary hazards: No special measures required.	
(Contd. on page 2)	See Section 7 for information on safe handling	
		(Contd. on page 2) USA

Product name: Dynorphin A (1-13), porcine

(Contd. of page 1)

See Section 13 for disposal information.	ı.	(Contd. of page 1)	
7 Handling and storage			
Handling Precautions for safe handling Keep container tightly sealed. Information about protection against explosions and fires: No information known.			
Conditions for safe storage, including Storage Requirements to be met by storeroon Information about storage in one com	<i>ms and receptacles:</i> Store in freezer (-20 °C).		
Protect from heat	nmon Storage facility:	· · · · · · · · · · · · · · · · · · ·	
Store away from oxidizing agents. Further information about storage co Specific end use(s) No further relevant	onditions: Keep container tightly sealed. t information available.		
8 Exposure controls/personal prote	lection		
	of technical systems: I designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.		
Control parameters Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data			
Exposure controls Personal protective equipment			
General protective and hygienic meas	SURES handling chamicals should be followed		
The usual precautionary measures for h Keep away from foodstuffs, beverages a Remove all soiled and contaminated clo	othing immediately		
Wash hands before breaks and at the er	end of work.		
	working environment. spirator when high concentrations are present.	'	
Protection of hands: Impervious gloves		'	
Check protective gloves prior to each us The selection of suitable gloves not only	ise for their proper condition. ly depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.		
Penetration time of glove material (in Eve protection: Safety glasses	n minutes) Not determined		
Body protection: Protective work clothi	ing		
9 Physical and chemical properties	<u>s</u>		
Information on basic physical and ch General Information Appearance:	emical properties		
Form: Color:	Solid White to off-white		
Odor: Odor threshold:	Not determined.		
pH-value:	Not determined. Not applicable.		
Change in condition			
Melting point/Melting range: Boiling point/Boiling range:	Not determined Not determined		
Sublimation temperature / start: Flammability (solid, gaseous)	Not determined Not determined		
Ignition temperature:	Not determined		
Decomposition temperature: Auto igniting:	Not determined Not determined.		
Danger of explosion:	Not determined.		
Explosion limits: Lower:	Not determined		
Upper: Vapor pressure:	Not determined Not applicable.		
Density: Relative density	Not determined Not determined		
Vapor density	Not applicable.		
Evaporation rate Solubility in / Miscibility with	Not applicable.		
Water: Partition coefficient (n-octanol/water).	Not determined		
Viscosity:	,		
dynamic: kinematic:	Not applicable. Not applicable.		
Other information	No further relevant information available.		
10 Stability and reactivity			
Reactivity No information known.			
Chemical stability Stable under recomme Thermal decomposition / conditions t	to be avoided: Decomposition will not occur if used and stored according to specifications.		
Possibility of hazardous reactions Re Conditions to avoid No further relevant	eacts with strong oxidizing agents		

Possibility of hazardous reactions Reacts with strong oxidizi Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Heat Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides

USA (Contd. on page 3)

Product name: Dynorphin A (1-13), porcine			
		(Contd. of page 2)	
Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properti Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No Specific target organ system toxicity - single exposure: No e Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known.	tances (RTECS) contains acute toxicity data for components in this product. ties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. No effects known. effects known. ledge the acute and chronic toxicity of this substance is not fully known.		
12 Ecological information			
Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information a Bioaccumulative potential No further relevant information avail Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without p Do not allow undiluted product or large quantities to reach ground Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. VPvB: Not applicable. Other adverse effects No further relevant information available.	proper governmental permits. nd water, water course or sewage system.		
13 Disposal considerations		i '	
<i>Waste treatment methods</i> <i>Recommendation</i> Consult state, local or national regulations to ensure proper disposal. <i>Uncleaned packagings:</i> <i>Recommendation:</i> Disposal must be made according to official regulations.			
14 Transport information			
UN-Number DOT, ADN, IMDG, IATA	Not applicable		
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable		
Transport hazard class(es)			
DOT, ADR, ADN, IMDG, IATA Class	Not applicable		
Packing group			
DOT, IMDG, IATA Environmental hazards:	Not applicable Not applicable.	I	
Environmental hazards: Special precautions for user	Not applicable. Not applicable.		
Transport in bulk according to Annex II of MARPOL73/78 and			
Transport/Additional information:			
DOT			
Marine Pollutant (DOT):	No		
UN "Model Regulation":	-		
to research and development only. This product must be used by product must not be used for commercial purposes or in formulat This product is not listed on the Canadian Domestic Substances SARA Section 313 (specific toxic chemical listings) Substance California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed Information about limitation of use: For use only by technically Other regulations. limitations and prohibitive regulations	Igency Toxic Substances Control Act Chemical Substance Inventory. Use of this p by or directly under the supervision of a technically qualified individual as defined by ations for commercial purposes. s List (DSL) or the Canadian Non-Domestic Substances List (NDSL). nce is not listed. bt listed. ted. d.	vroduct is restricted y TSCA. This	

Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out. USA-

Product name: Dynorphin A (1-13), porcine

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16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / -Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LDS0: Lethal concentration, 50 percent VPUB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IAPC: International Zafety and Health Administration (USA) NTP: National Toxicology Program (USA) IAPC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

USA