

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: Minocycline hydrochloride Stock number: J66429 CAS Number: 13614-98-7 EC number: 37-099-7 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. Inerrito Fisher Scheman C. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789. 2 Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) ! GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No information known. Label elements GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements Precadionary statements P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P405 Store locked um P405 Store locked um Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. P405 WHMIS classification D2A - Very toxic material causing other toxic effects Ţ Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammàbility = 1 TIVITY 1 Physical Hazard = 1 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable 3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 13614-98-7 Minocycline hydrochloride Identification number(s): EC number: 237-099-7 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. (Contd. on page 2)

Product name: Minocycline hydrochloride

(Contd. of page 1)

Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor

Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special freatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen chloride (HCI) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 13 for disposal information See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling
Keep container tightly sealed.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires: No information known.
Conditions for safe storage, including any incompatibilities Storage
Requirements to be met by storerooms and receptacles: Refrigerate Information about storage in one common storage facility:
Protect from heat.
Store away from oxidizing agents.
Further information about storage conditions:

Keep container tightly sealed. Refrigerate Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood 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

Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eves and skin

Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands:

Impervious gloves Check protective gloves prior to each use for their proper condition.

The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Penetration time of glove material (in minutes)** Not determined **Eye protection:** Safety glasses **Body protection:** Protective work clothing.

9 Physical and chemical properties

s r nysicar and chemicar properties			
Information on basic physical and ch General Information Appearance: Form:	Powder		
Color:	Yellow		
Odor:	Not determined		
Odor threshold:	Not determined.		
pH-value:	Not applicable.		
Change in condition Melting point/Melting range: Boiling point/Boiling range:	205-210 °C (401-410 °F) 813 °C (1495 °F)		

(Contd. on page 3)

Minocycline bydrochloride Product r

Page 3/4 Printing date 11/24/2015 Reviewed on 05/01/2014

Product name: Minocycline hydroc	hloride			
Sublimation tomporature / start.	(Contd. of page			
Sublimation temperature / start: Flash point:	Not determined > 110 °C (> 230 °F)			
Flammability (solid, gaseous) Ignition temperature:	Not determined.			
Ignition temperature: Decomposition temperature:	Not determined Not determined			
Auto igniting:	Not determined.			
Danger of explosion: Explosion limits:	Not determined.			
Lower:	Not determined			
Upper: Vapor pressure:	Not determined Not applicable			
Density:	Not applicable. Not determined			
Relative density Vapor density	Not determined. Not applicable.			
Evaporation rate Solubility in / Miscibility with	Not applicable.			
Water:	Not determined			
Partition coefficient (n-octanol/water) Viscosity:): Not determined.			
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 recom	mended storage conditions.			
Thermal decomposition / conditions	to be avoided. Decomposition will not occur if used and stored according to specifications.			
Possibility of hazardous reactions Re Conditions to avoid No further relevar				
Incompatible materials: Oxidizing agents				
Heat				
Hazardous decomposition products: Carbon monoxide and carbon dioxide				
Nitrogen oxides Hydrogen chloride (HCl)				
11 Toxicological information				
Information on toxicological effects Acute toxicity: The Registry of Toxic F	ffects of Chemical Substances (RTECS) contains acute toxicity data for this substance.			
LD/LC50 values that are relevant for				
Oral LD50 2380 mg/kg (rat)	Des Suder dess			
Skin irritation or corrosion: Causes s Eye irritation or corrosion: Causes se	prious eye irritation.			
Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, JARC, NTP, OSHA or ACG/H.				
				Reproductive toxicity: No effects know Specific target organ system toxicity
Specific target organ system toxicity	- single exposure: May cause respiratory irritation.			
Aspiration hazard: No effects known. Subacute to chronic toxicity: The Re	gistry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.			
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.			
12 Ecological information				
Toxicity				
Aquatic toxicity: No further relevant in Persistence and degradability No furt	her relevant information available.			
Bioaccumulative potential No further Mobility in soil No further relevant info	relevant information available.			
Additional ecological information:	rmation available.			
General notes:	quantities to reach ground water, water course or sewage system.			
Avoid transfer into the environment.				
Results of PBT and vPvB assessmer PBT: Not applicable.	it states and states a			
vPvB: Not applicable. Other adverse effects No further relev	ant information available			
13 Disposal considerations				
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal.				
Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.				
Recommendation: Disposal must be n				
14 Transport information				
UN-Number DOT, ADN, IMDG, IATA	Not applicable			
UN proper shipping name	νοι αμριισανίε			
DOT, ADN, IMDG, ĬATA	Not applicable			
Transport hazard class(es)				
DOT, ADR, ADN, IMDG, IATA Class	Not applicable			
	(Contd. on pag			

(Contd. on page 4)

	Reviewed on 05/01/20
oduct name: Minocycline hydrochloride	
	(Contd. of page
Packing group DOT, IMDG, IATA	Not applicable
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL7	
Transport/Additional information:	
DOT	
Marine Pollutant (DOT): UN "Model Regulation":	No
5 Regulatory information Safety, health and environmental regulations/legisla GHS label elements The product is classified and label Hazard pictograms GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements	<i>tion specific for the substance or mixture</i> led in accordance with 29 CFR 1910 (OSHA HCS)
P261 Avoid breathing dust/fume/gas/mist/v P280 Wear protective gloves/protective clo P305+P351+P338 IF IN EYES: Rinse cautiously with wa P304+P340 IF INHALED: Remove person to fresi P405 Store locked up. P501 Dispose of contents/container in acco National regulations This product is not listed in the U.S. Environmental Protection	othing/eye protection/face protection. ater for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. sh air and keep comfortable for breathing. ordance with local/regional/national/international regulations. rection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restric e used by or directly under the supervision of a technically qualified individual as defined by TSCA. This oformulations for commercial purposes. bstances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).
Prop 65 - Developmental toxicity	
13614-98-7 Minocycline hydrochloride Prop 65 - Developmental toxicity, female Substance is Prop 65 - Developmental toxicity, male Substance is r Information about limitation of use: For use only by te Other regulations, limitations and prohibitive regulat Substance of Very High Concern (SVHC) according to The conditions of restrictions according to Article 63	not listed. echnically qualified individuals.
market and use must be observed.	
Substance is not listed. Annex XIV of the REACH Regulations (requiring Auto Chemical safety assessment: A Chemical Safety Asse	horisation for use) Substance is not listed.
Chemical safety assessment: A Chemical Safety Asse	essment has not béen carried out.
information to ensure proper use and protect the health	ment to other information gathered by them, and should make independent judgement of suitability of this and safety of employees. This information is furnished without warranty, and any use of the product not combination with any other product or process, is the responsibility of the user.
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 pa	
EINECS: European Inventory of Existing Commercial Chemical Substance CAS: Chemical Abstracts Service (division of the American Chemical Socie HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LCS0: Lethal concentration, 50 percent	
LDOU: Letnal acose, So percent VPVB: 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) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	l)
NTP: National Toxicology Program (USA)	