

1 Identification Product identifier Product name: L-Tryptophanamide hydrochloride Stock number: H63405 CAS Number: 5022-65-1 EC number: 225-708-9 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) The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No information known. I abel elements GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammability = 1 Flammability = 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: 5022-65-1 L-Tryptophanamide hydrochloride Identification number(s): EC number: 225-708-9 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. 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 treatment needed No further relevant information available. 5 Fire-fighting measures 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 Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course.

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Product name: L-Tryptophanamide	hydrochloride
Methods and material for containmen Prevention of secondary hazards: No Reference to other sections See Section 7 for information on safe hi See Section 8 for information on persor See Section 13 for disposal information	al protection equipment.
7 Handling and storage	
Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed	containers. <b>explosions and fires:</b> No information known.
	ns and receptacles: No special requirements. Inmon storage facility: Store away from oxidizing agents. Inditions: ied containers.
8 Exposure controls/personal prot	ection
Additional information about design	
Control parameters Components with limit values that re	
Use a respirator with type N95 (USA) or purifying respirators are appropriate. O <b>Protection of hands:</b> Impervious gloves Check protective gloves prior to each us	Tanding chemicals should be followed. and feed othing immediately. nd of work. working environment. spirator when high concentrations are present. <b>term use:</b> ' PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air- nly use equipment tested and approved under appropriate government standards. se for their proper condition. / depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. <b>minutes)</b> Not determined
9 Physical and chemical properties	5
Information on basic physical and ch General Information Appearance: Form:	
Color:	Powder Off-white
Odor: Odor threshold:	Not determined Not determined.
pH-value:	Not applicable.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Elempebility (polid	Not determined Not determined Not determined

Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined
Flammability (solid, gaseous)	Not determined.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Auto igniting:	Not determined.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not applicable.
Density:	Not de'termined
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Soluble
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Other information	No further relevant information available.

## 10 Stability and reactivity

Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Product name: L-Tryptophanamide hydrochloride		
Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen chloride (HCI)		(Contd. of page 2)
11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data 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 effects known. Carcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute	n.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow undiluted product or large quantities to reach ground water, water a 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.	course or sewage system.	
13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. Recommended cleansing agent: Water, if necessary with cleansing agents.	disposal.	
14 Transport information		
UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name		
DOŤ, ÁDN, IMĎG, ľATA Transport hazard class(es)	Not applicable	
DOT, ADR, ADN, IMDG, IATA		
Class	Not applicable	
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 MARPOL73/78 and the IBC Cod	e Not applicable.	
Transport/Additional information:		
DOT Marine Pollutant (DOT):	No	
UN "Model Regulation":	-	
15 Regulatory information Safety, health and environmental regulations/legislation specific for the su GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable Mational regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Su to research and development only. This product must be used by or directly und product must not be used for commercial purposes or in formulations for commer This product is not listed on the Canadian Domestic Substances List (DSL) or the SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed.	bstances Control Act Chemical Substance Inventory. Use of this pr der the supervision of a technically qualified individual as defined by ercial purposes. he Canadian Non-Domestic Substances List (NDSL).	roduct is restricted / TSCA. This

Information about limitation of use: For use only by technically qualified individuals.

(Contd. on page 4)

## Product name: L-Tryptophanamide hydrochloride

(Contd. of page 3)

Conta. of page 3 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. 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. Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / -

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 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

 EINECS: European Inventory of Existing Commercial Chemical Substances

 CAS: Chemical Abstracts Service (division of the American Chemical Society)

 HMIS: Hazardous Materials Identification System (USA)

 WHMIS: Workplace Hazardous Materials Information System (Canada)

 LD50: Lethal concentration, 50 percent

 LD50: Lethal concentration, 50 percent

 VPWE very Persistent and very Bioaccumulative

 ACGIH: American Collega Program (USA)

 VFP: National Toxicology Program (USA)

 VAR: Occupational Agency for Research on Cancer

 EPA: Environmental Protection Agency (USA)

USA