

## Safety Data Sheet per OSHA HazCom 2012

per OSHA HazCom 2012 Pri Re	nting date 11/24/2015 viewed on 11/03/2015
1 Identification Product identifier Product name: <u>6-Maleimidocaproic acid N-succinimidyl ester</u>	
Stock number: H65996 CAS Number: 55750-63-5 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. 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) 9	28-0789.
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. <b>Hazards not otherwise classified</b> 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.   H315 Causes serious eye irritation.   H335 May cause respiratory irritation.   H335 May cause respiratory irritation.   Precautionary 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 rin   P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.   P405 Store locked up.   P501 Dispose of contents/container in accordance with local/regional/national/international regulations.   WHMIS classification D2B - Toxic material causing other toxic effects	sing.
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Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH I Health (acute effects) = 1 FIRE I Flammability = 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: 55750-63-5 6-Maleimidocaproic acid N-succinimidyl ester	
<i>4 First-aid measures</i> <i>Description of first aid measures</i> <i>After inhalation</i> Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. <i>After skin contact</i> 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.	(Contd. on page 2) USA

## Product name: 6-Maleimidocaproic acid N-succinimidyl ester (Contd. of page 1) 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: Or how monowide and each and the product of the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) 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. 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 8 for information on personal protection equipment. See Section 13 for disposal information. 7 Handling and storage Handling Precautions for safe handling Handle under dry protective gas. 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: Store in freezer (-20 °C). Information about storage in one common storage facility: Store in the dark. Protect from heat. Store away from water/moisture. Store away from oxidizing agents. Further information about storage conditions: Further information about storage conditions: Store under dry inert gas. This product is hygroscopic. This product is moisture sensitive. Keep container tightly sealed. Protect from humidity and water. Protect from exposure to light. 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 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 etime. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. **Breathing equipment:** Use suitable respirator when high concentrations are present. **Recommended filter device for short term use:** Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. **Protection of hands:** Impervious gloves 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. **Eye protection:** Safety glasses **Body protection:** Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Solid Color: Odor: White to pale brown Not determined Odor threshold: Not determined

(Contd. on page 3)

## Product name: 6-Maleimidocaproic acid N-succinimidyl ester

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pH-value:	Not applicable.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:	69-74 °C (156-165 °F) Not determined Not determined Not determined. Not determined Not determined Not determined
Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic:	Not determined. Not determined Not applicable. Not determined Not determined. Not applicable. Not applicable. Not applicable.
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm Thermal decomposition / conditions to Possibility of hazardous reactions Rea Conditions to avoid No further relevant Incompatible materials: Water/moisture Oxidizing agents Heat Light Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides	<b>b be avoided</b> : Decomposition will not occur if used and stored according to specifications. acts with strong oxidizing agents
Reproductive toxicity: No effects known Specific target organ system toxicity - Specific target organ system toxicity - Aspiration hazard: No effects known	in irritation. ious eye irritation. wn. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
12 Ecological information Toxicity Aquatic toxicity: No further relevant info Persistence and degradability No further Bioaccumulative potential No further re Mobility in soil No further relevant inform Additional ecological information: General notes: Do not allow undiluted product or large qu Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant	nation available. nation available. uantities to reach ground water, water course or sewage system.
13 Disposal considerations Waste treatment methods Recommendation Consult state, local of Uncleaned packagings: Recommendation: Disposal must be ma	r national regulations to ensure proper disposal. ade according to official regulations.
14 Transport information	

Not applicable

UN-Number DOT, ADN, IMDG, IATA

UN proper shipping name DOT, ADN, IMDG, IATA Not applicable

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	Reviewed on 11/03/201
roduct name: 6-Maleimidocaproic acid N-succi	nimidyl ester
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Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, IMDG, IATA	
Environmental hazards:	Not applicable Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL7	
Transport/Additional information:	
DOT	
Marine Pollutant (DOT):	No
UN "Model Regulation":	<u> </u>
5 Regulatory information Safety, health and environmental regulations/legislat GHS label elements The product is classified and labele Hazard pictograms	t <b>ion specific for the substance or mixture</b> ad in accordance with 29 CFR 1910 (OSHA HCS)
P304+P340 IF INHALED: Remove person to fresh P405 Store locked up. P501 Dispose of contents/container in acco National regulations This product is not listed in the U.S. Environmental Prote to research and development only. This product must be product must not be used for commercial purposes or in ; This product is not listed on the Canadian Domestic Sub SARA Section 313 (specific toxic chemical listings) S California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance Prop 65 - Developmental toxicity, female Substance is Prop 65 - Developmental toxicity, male Substance is in Information about limitation of use: For use only by ter	thing/eyé protection/face protection. ter for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. h air and keep comfortable for breathing. brdance with local/regional/national/international regulations. ection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restrict used by or directly under the supervision of a technically qualified individual as defined by TSCA. This formulations for commercial purposes. Istances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). Substance is not listed. ed. so tot listed. bot listed. cot listed. cot is not listed. cot is not listed. cot is not listed. cot is not listed. cot and Annex XVII of the Regulation (EC) No. 1907/2006. Substance is not listed. T and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the horisation for use) Substance is not listed.
information to ensure proper use and protect the health a conformance with this Material Safety Data Sheet, or in c	nent 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 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 1/24/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par ADR: Accord européen sur le transport des marchandises dangereuses par	nt rr 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 Socie: HMIS: Hazardous Materials Identification System (USA) WHIMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal cose, 50 percent VPVB: very Persistent and very Bioaccumulative	dy)

LD50: Lethal dose, 50 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)

USA