

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: Fluorescein amine isomer II Stock number: J60609 CAS Number: 51649-83-3 EC number: 7-334-7 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 D2B - Toxic material causing other toxic effects Ţ Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammàbility = 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: 51649-83-3 6-Amino-3',6'-dihydroxyspiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one Identification number(s): EC number: 257-334-7 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. (Contd. on page 2)

(Contd. of page 1)

Product name: Fluorescein amine isomer II

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) 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 material to be released to the environment without proper governmental permits. 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 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 Personal protective equipment The usual 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 eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves 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

Information on basic physical and o General Information Appearance: Form: Color: Odor: Odor threshold:	hemical properties Powder Yellow Not determined Not determined.		
pH-value:	Not applicable.		
Change in condition Melting point/Melting range:	285 °C (545 °F) (dec)		

(Contd. on page 3)

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Page 3/4 Printing date 11/24/2015 Reviewed on 06/13/2013

Product name: Fluorescein amine is	somer II	
		(Contd. of page 2)
Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not determined Not determined Not determined Not determined Not determined Not determined.	
Danger of explosion: Explosion limits: Lower:	Not determined. Not determined	
Upper: Vapor pressure: Density: Relative density	Not determined Not applicable. Not determined Not determined.	
Vapor density Evaporation rate Solubility in / Miscibility with	Not applicable. Not applicable.	
Water: Partition coefficient (n-octanol/water) Viscosity: dynamic:	Not determined : Not determined. Not applicable.	
kinematic: Other information	Not applicable. No further relevant information available.	
10 Stability and reactivity Reactivity No information known.		
Chemical stability Stable under recom	be avoided: Decomposition will not occur if used and stored according to specifications. acts with strong oxidizing agents	
Carbon monoxide and carbon dioxide Nitrogen oxides		
Reproductive toxicity: No effects know Specific target organ system toxicity Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effec Additional toxicological information:	in irritation. rious eye irritation. own. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. rn. - repeated exposure: No effects known. - single exposure: May cause respiratory irritation.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant inf	ormation 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 material to be released to to Do not allow undiluted product or large of Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	he environment without proper governmental permits. juantities to reach ground water, water course or sewage system. t	
Other adverse effects No further releva	ant information available.	
13 Disposal considerations Waste treatment methods Recommendation Consult state, local of Uncleaned packagings: Recommendation: Disposal must be m	or national regulations to ensure proper disposal. ade according to official regulations.	
14 Transport information		
UN-Number DOT, ADN, IMDG, IATA UN proper shipping name	Not applicable	
UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es)	Not applicable	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, IMDG, IATA	Not applicable	
		(Contd. on page 4) USA –

Product name: Fluorescein amine isomer II	
	(Contd. of page 3)
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73	3/78 and the IBC Code Not applicable.
Transport/Additional information:	
DOT Marina Ballutant (DOT):	
Marine Pollutant (DOT):	No
UN "Model Regulation":	-
15 Regulatory information	
Safety, health and environmental regulations/legislatio GHS label elements The product is classified and labeled Hazard pictograms	
GHS07	
P304+P340 IF INHALED: Remove person to fresh a P405 Store locked up. P501 Dispose of contents/container in accom National regulations This product is not listed in the U.S. Environmental Protect to research and development only. This product must be u product must not be used for commercial purposes or in fo This product is not listed on the Canadian Domestic Subsi SARA Section 313 (specific toxic chemical listings) Su California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance Prop 65 - Developmental toxicity, female Substance is not Information about limitation of use: For use only by tec Other regulations, limitations and prohibitive regulatio Substance of Very High Concern (SVHC) according to The conditions of restrictions according to Article 67 a market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Author Chemical safety assessment: A Chemical Safety Asses	thing/eye protection/face protection. ther for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. a air and keep comfortable for breathing. bordance with local/regional/national/international regulations. Exction Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted used by or directly under the supervision of a technically qualified individual as defined by TSCA. This formulations for commercial purposes. stances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). Substance is not listed. ed. s not listed. bot listed. bot listed. chnically qualified individuals. ions o the REACH Regulations (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 ar conformance with this Material Safety Data Sheet, or in co	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 11/24/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par l 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) LC50: Lethal concentration, 50 percent DD50: Lethal dose, 50 percent VPUS: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA)	r Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) s ty)

ACGIH: American Conference of Governmental Industrial Hyg OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

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