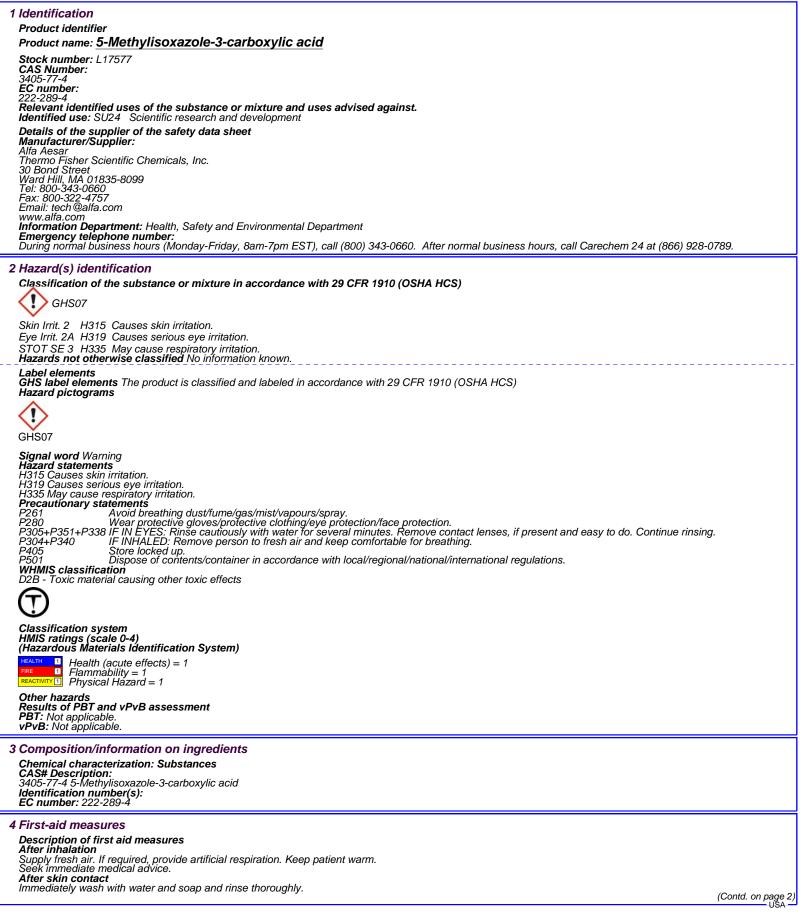


Safety Data Sheet per OSHA HazCom 2012



## Product name: 5-Methylisoxazole-3-carboxylic acid (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 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 fireficience 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. Revented and indering the secondary has the second and cleaning up. Listing 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. International and the second s Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. 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 rersonal 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 eyes and skin. Maintain an ergonomically appropriate working environment Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves The periods gloves of the prior to each use for their proper condition. 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 Information on basic physical and chemical properties **General Information** Appearance: Form: Powder Color: White Not determined Odor: Odor threshold: Not determined pH-value: Not applicable. Change in condition 171-173 °C (340-343 °F) Not determined Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Not determined Not determined (Contd. on page 3)

## Product name: 5-Methylisoxazole-3-carboxylic acid

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		(Contd. of page
Decomposition temperature: A	Not determined Not determined Not determined.	, <u>,</u>
	Not determined.	
Explosion limits:		
	Not determined Not determined	
Vapor pressure:	Not applicable.	
	Not détermined Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water:	Not determined	
Partition coefficient (n-octanol/water): N	Vot determined.	
Viscosity: dynamic: ۸	Not applicable.	
kinematic: ۸	Not applicable.	
Other information	No further relevant information available.	
0 Stability and reactivity		
Reactivity No information known. Chemical stability Stable under recomme	andad starage conditions	
Thermal decomposition / conditions to	be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions Reac	cts with strong oxidizing agents	
Conditions to avoid No further relevant in Incompatible materials: Oxidizing agents	nonnanon avanable. S	
Hazardous decomposition products:		
Carbon monoxide and carbon dioxide Nitrogen oxides		
1 Toxicological information		
Information on toxicological effects		
Acute toxicity: No effects known.		
LD/LC50 values that are relevant for cla		
Skin irritation or corrosion: Causes skin Eye irritation or corrosion: Causes serio	unauon. Jus eve irritation.	
Sensitization: No sensitizing effects know	vn.	
Germ cell mutagenicity: No effects know	n. n carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects known.		
Specific target organ system toxicity - r	repeated exposure: No effects known.	
Specific target organ system toxicity - s Aspiration hazard: No effects known.	single exposure: May cause respiratory irritation.	
Subacute to chronic toxicity: No effects	known.	
	o the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
2 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant inform Persistence and degradability No further	mation available. r relevant information available	
Bioaccumulative potential No further rele	evant information available.	
Mobility in soil No further relevant informa	ation available.	
Additional ecological information: General notes:		
Do not allow material to be released to the	e environment without proper governmental permits.	
Do not allow undiluted product or large qua Avoid transfer into the environment.	antities to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessment		
PBT: Not applicable.		
vPvB: Not applicable. Other adverse effects No further relevant	t information available.	
3 Disposal considerations		
Waste treatment methods		
	national regulations to ensure proper disposal.	
Recommendation Consult state, local or i		
Recommendation Consult state, local or i Uncleaned packagings: Recommendation: Disposal must be mad	de according to official regulations.	
Uncleaned packagings: Recommendation: Disposal must be mad	de according to official regulations.	
Uncleaned packagings: Recommendation: Disposal must be mad 4 Transport information UN-Number		
Uncleaned packagings: Recommendation: Disposal must be mad 4 Transport information UN-Number DOT, ADN, IMDG, IATA	de according to official regulations. Not applicable	
Uncleaned packagings: Recommendation: Disposal must be mad 4 Transport information UN-Number		
Uncleaned packagings: Recommendation: Disposal must be made 4 Transport information UN-Number DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es)	Not applicable	
Uncleaned packagings: Recommendation: Disposal must be made 4 Transport information UN-Number DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA	Not applicable Not applicable	
Uncleaned packagings: Recommendation: Disposal must be made Transport information UN-Number DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not applicable Not applicable Not applicable	
Uncleaned packagings: Recommendation: Disposal must be made Transport information UN-Number DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA	Not applicable Not applicable Not applicable Not applicable	
Uncleaned packagings: Recommendation: Disposal must be made Transport information UN-Number DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards:	Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable.	
Uncleaned packagings: Recommendation: Disposal must be made Transport information UN-Number DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards: Special precautions for user	Not applicable Not applicable Not applicable Not applicable	

(Contd. on page 4)

Safety Data Sheet per OSHA HazCom 2012

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Product name: 5-Methylisoxazole-3-carboxylic acid		
	(Contd. of page 3)	
Transport/Additional information:		
DOT Marine Pollutant (DOT):	No	
UN "Model Regulation":		
15 Regulatory information		
Safety, health and environmental regulations/legislation specific for the substance or mixture 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		
P261 Avoid breathing dust/fume/gas/mist/vapours/spray		
P280 Wear protective gloves/protective clothing/eye pro P305+P351+P338 IF IN EYES: Rinse cautiously with water for sever P304+P340 IF INHALED: Remove person to fresh air and kee	otection/race protection. ral minutes. Remove contact lenses, if present and easy to do. Continue rinsing. p comfortable for breathing.	
P405 Store locked up. P501 Dispose of contents/container in accordance with	local/regional/national/international regulations.	
National regulations This product is not listed in the U.S. Environmental Protection Agenc	cy Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted	
to research and development only. This product must be used by or product must not be used for commercial purposes or in formulations This product is not listed on the Canadian Domestic Substances List	directly under the supervision of a technically qualified individual as defined by TSCA. This s for commercial purposes. (DSL) or the Canadian Non-Domestic Substances List (NDSL).	
SARA Section 313 (specific toxic chemical listings) Substance is California Proposition 65	not listed.	
Prop 65 - Chemicals known to cause cancer Substance is not listed	əd.	
Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed.		
Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qua	alified individuals	
Other regulations, limitations and prohibitive regulations		
	x XVII of the Regulation (EC) No 1907/2006. Substance is not listed.	
market and use must be observed. Substance is not listed.		
Annex XIV of the REACH Regulations (requiring Authorisation for Chemical safety assessment: A Chemical Safety Assessment has	or use) Substance is not listed.	
16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of conformance with this Material Safety Data Sheet or in combination.	r information gathered by them, and should make independent judgement of suitability of this f employees. This information is furnished without warranty, and any use of the product not in 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 / -		
ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europe DOT: US Department of Transportation	an Agreement concerning the International Carriage of Dangerous Goods by Road)	
Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europe 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 LD50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent		
WHMIS: Workplace Hazardous Materials Information System (OSA) WHMIS: Workplace Hazardous Materials Information System (Canada) I C50: I ethal concentration. 50 percent		
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)		
LD30. Lettral 1005e, 50 per Cent 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)		
בו ה. בוואווטווווסווגמו רוטנפטוטו אפטוטא (טטא)	USA	