Safety Data Sheet



Kevisi	on date 06/29/2016
1 Identification	
Product identifier	
Product name: L11039, 2-Amino-5-methylthiazole	
Stock number: 96656 CAS Number:	
7305-71-7 ELINCS Number:	
423-800-5 Index number:	
613-308-00-0	
Relevant identified uses of the substance or mixture and uses advised against. No further relevant information available. 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) 928	-0789.
2 Hazard(s) identification	
Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)	
GHS08 Health hazard	
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral.	
GHS07	
Acute Tox. 4 H302 Harmful if swallowed. 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	
$\wedge \wedge$	
GHS07 GHS08	
Signal word Warning Hazard statements	
H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral.	
Precautionary statements	
P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P314 Get medical advice/attention if you feel unwell.	
P314 Get medical advice/attention if you feel unwell. P330 Rinse mouth.	
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
WHMIS classification	
D2A - Very toxic material causing other toxic effects	
Classification system	
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH 2 Health (acute effects) = 2	
FRE I Flammability = 1 Flammability = 1 REACTIVITY I 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:	
7305-71-7 2-Amino-5-methylthiazole Identification number(s):	
ELINCS Number: 423-800-5 Index number: 613-308-00-0	
	USA USA (Contd. on page 2)
	,

4 First-aid measures

After inhalation

Description of first aid measures

(Contd. of page 1)

Product name: L11039, 2-Amino-5-methylthiazole

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact 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 Mact important currentees and offects, both agute and dolayed Most important symptoms and effects, both acute and delayed Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral. 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 Sulfur oxides (SOx) 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: Dispose of contaminated material as waste according to section 13. 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. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Prevent formation of dust. 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: 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 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. 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 P100 (USA) or P3 (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 Check protective gloves prior to each use for their proper condition. 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. USA (Contd. on page 3) Product name: L11039, 2-Amino-5-methylthiazole

<pre> Privation and chemical properties Internation abscie physical and chemical properties General Internation Form:</pre>			(Contd. of page 2)	
General Information Powder Provide Pro	9 Physical and chemical properties			
Odd:r Recognitable Dd:r.m.schold: Mod applicable. Driverbale: Mod applicable. Driverbale: Mod applicable. Defining point/Boiling range: SS 80 (2023-208 (%)) Rest point: Mod applicable. Present: Mod applicable. Anto Expension: Mod applicable. Present: Mod applicable. Anto Expension: Mod applicable. Present: Mod applicable. Present: <t< th=""><th>General Information Appearance:</th><th></th><th></th></t<>	General Information Appearance:			
pH-value: Not applicable. Change in condition 65.98 °C (703-706 °F) Stabilization (Interpretating State) 65.98 °C (703-706 °F) Stabilization (Interpretating State) Not deprime Plann ability (sold, depretation (Interpretation (Interpretatin (Interpretation (Interpretation (Interpretation (I	Odor:	Recognizable		
Change in condition 95-94 °C (203:06 *F) Metting southWeing range. 95-94 °C (203:06 *F) Sublimation temperature? start Not applicable Plass politic Not determined Decomposition temperature: Not determined Actor generation Not determined Denser of explosion: Not determined Upper Not determined Denser of explosion: Not applicable <				
Flammability (solid, gaseous) Mid delemined; Auto Eigning: Mid delemined; Auto Eigning: Product des not present an explosion hazard. Explore desplosion: Product des not present an explosion hazard. Explore desplosion: Product des not present an explosion hazard. Explore desplosion: Product des not present an explosion hazard. Explore desploy: Mid defermined; Vaper of explosion: Product des not present an explosion hazard. Explore density Mid defermined; Vaper of explosion: Mid defermined; Vaper of explosion: Mid defermined; Vaper of ensity Mid applicable. Vate: Nid applicable. Vate: Nid applicable. Vate: Nid applicable. Vase:	Change in condition Melting point/Melting range: Boiling point/Boiling range:	95-98 °C (203-208 °F) Not determined		
Explosion limits: Not applicable. Upper Not applicable. Orasity: Not applicable. Partition: Coefficient (In-octane/Water): Kot determined. Not applicable. Synaprice: Not applicable. Orasity: Not applicable. Water: Not applicable. Water: Not applicable. Orasity: Not applicable. Otage: Not uther relevant information available. Otage: Not uther relevant information available. Information and example: Not uther relevant information available. Hazardous Receiver Notions: Not uther relevant information available. Information on toxicological affects Audie toxicological information Information or corresion: May cause intation Subitir vokice (Sov) Otage: 2.2 gmkg (rel Orasity: Yes applicable. Operation: Sovandia applicable.	Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:	Not determined. Not determined Not determined		
Upper: Not determined Vapor pressure: Not determined Vapor pressure: Not determined Vapor density Not determined Partition coefficient (In-octanol/water): Not determined. Not applicable. Vapor density Not applicable. Water: Not applicable. Vapor density Not applicable. Vapor	Explosion limits:			
Relative density Not determined. Vapor density Not applicable. Vapor density Not applicable. Solubility in / Miscibility with Not determined. Partition. Not applicable. Water: Not applicable. Other information No Linther relevant information available. 10 Stability and reactivity No applicable. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong codicing agents Conditions to avoide No Enveloped Strong relevant from decourt if used and stored according to specifications. Possibility oxites (Son) 11 Toxicological information Information on toxicological effects Accur to avoide No Envelopicable invalues initiation Swith initiation or corrosion: May cause initiation Carlon monoxion decises finant or cleast finant Dott Co values that a	Upper:	Not determined Not applicable.		
Evisoration rate with Mischilling With Net deprivation. Not deprivation. Not deprivation. Not deprivation. Not deprivation. Not determined without the coefficient (n-octanol/water): Not determined visorative visorative. Not determined visorative visorative visorative. Not determined visorative vi	Relative density	Not determined.		
Partition coefficient (p-octanol/water): Not determined. Viscosity: Not spplicable. Viscosity: Not spplicable. Other information Not further netwart information available. 10 Stability and reactivity Reactivity No information known. Chemical stability Stability with strong oxiding agents Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Pressibility of hazerdous reactions Reactions and carbon dioxide storage conditions agents Hazerdous decomposition products: Hazerdous decomposition products: Carbon monoxide and carbon dioxide Sulfit oxidity: Hamuil if availoaded Stability and reaction fractions Hazerdous (S (OX) Stability: Hamuil if availoaded Orar LDD (CSO values that are refervant for classification: Orar LDD (CSO values that are refervant for classification: Server institution or corrosition: May cause institution Server institution or corrosition (May cause) institution Server institution: No sensitization: No effects known: Server institution (Not effects known: Server institution: No effects known: Server institution: Server institution: No effects known: Server institution: Server instructu	Evaporation rate Solubility in / Miscibility with	Not applicable.		
dynamic: Not applicable. No turther relevant information available. 10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermical stability Stable under recommended storage conditions. Chemical stability Stable under recommended storage conditions. Thermical stability of heardour services areactions Reacts with storing oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Heardours decomposition products: Sufficient oxides 11 Toxicological information Information on toxicological effects Acute toxicological effects known. Germ cell mutagenicity: No effects known. Germ cell mutagenicity: No effects known. Sensitization: No sensitization of eaconscience properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Repetific turge torgan is not known. Subacute to chronic toxicity: Sense thoxicological or properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Repetific turge torgan is not known. Subacute to chronic toxicity: No effects known. Subacute to chronic toxicity: No effects known. Subacute to chronic toxicity: No effects known. Carchogenic categories OSHA-2 of Occupational Safety & Health Administ	Water: Not determined Partition coefficient (n-octanol/water): Not determined.			
Reactivity No information known. Chemical stability Stability under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with storage oxidiang agents Conditions to avoid No further relevant information available. Incompatible materials: Conditionation available. Marcine Conditions to avoid No further relevant information available. Information on toxicological effects Actue toxicity: Harmitul if swallowed. LDLC50 values that are relevant for classification: Oral LDD50 88 mg/kg (rat) Dermal LD50 [88 mg/kg (rat) Dermal LD50 [88 mg/kg (rat) Skin Inritation or corrosion: May cause intation Serred cute toxicity: No effects known. Genred Linge of the order of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive foxicity: No effects known. Specific target organ is not up thoring or repeated exposure: Not effects known. Specific target organ is not work or thore and the order or the	dynamic: kinematic:	Not applicable.		
Information Acute toxicity: Harmful if swallowed. LD/LCS0 values that are relevant for classification: Oral LD50 > 2 gm/kg (rat) Dermal LD50 > 2 gm/kg (rat) Skin irritation or corrosion: May cause irritation Fye irritation or corrosion: May cause irritation Germ cell mutagenicity: No effects known. Germ cell mutagenicity: No effects known. Germ cell mutagenicity: No effects known. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: May cause damage to organ sthrough prolonged or repeated exposure: Oral. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subscute to chronic toxicity: No effects known. Aspiration hazard: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 12 Ecological information Yaxicity	Possibility of hazardous reactions Re Conditions to avoid No further relevan Incompatible materials: Oxidizing age Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides	eacts with strong oxidizing agents t information available.		
LDLC50 values that are relevant for classification: Oral LD50 >2 gm/kg (rat) Dermal LD50 >2 gm/kg (rat) 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. Germ cell mutagenicity: No effects known. Gern cell mutagenicity: No effects known. Specific target organ system toxicity: repeated exposure: May cause damage to organ stincuigh prolonged or repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aggration hazed: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ce (Occupational Safety & Health Administration) Substance is not listed. 12 Ecological information Toxicity Aguatic toxicity: No further relevant information available. Bioaccumulative potential No further relevant information available. Bioaccumulative potential No further relevant information available. Bioaccumulative potential No further rel	Information on toxicological effects			
Demail LD50 >2 gm/kg (rat)' 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. Germ cell mutagenicity: No effects known. Specific target organ system toxicity - repeated exposure: May cause damage to organs through prolonged or repeated exposure: Oral. Specific target organ is not 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 and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Ecotoxical effects: Mobility in soil No further relevant information available. Ecotoxical effects: Mobility in soil No further relevant information available. Ecotoxical effects: Boaccumulative potential	LD/LC50 values that are relevant for o	assification:		
Eye irritation or corrosion: May cause irritation Sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on 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 - repeated exposure: May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral. Specific target organ is not 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 and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 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. Ecotoxical effects: Remark: Very toxic for aquatic organisms Additional ecological information: Ecotoxical information: Bioaccumulative potential No further relevant information available. Ecotoxical effects: Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking wate	Dermal LD50 >2 gm/kg (rat)			
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Specific target organ system toxicity - repeated exposure: May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral. Specific target organ is not known. Specific target organ is not known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 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. Ecotoxical effects: Remark: Very toxic for aquatic organisms Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow product to react ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also projesnous for the and plankton in water bodies.	Eye irritation or corrosion: May cause Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects kno	Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing 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 and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 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. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Ecotoxical effects: Remark: Very toxic for aquatic organisms Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow moduct to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.	Carcinogenicity: No classification data Reproductive toxicity: No effects know Specific target organ system toxicity	on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. vn. - repeated exposure:		
Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 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. Bioaccumulative potential No further relevant information available. Bioaccumulative potential No further relevant information available. Ecotoxical effects: Remark: Very toxic for aquatic organisms Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow material to be released to the environment without proper governmental permits. Do not allow materi if even extremely small quantities leak into the ground. Also poissonus for fish and plankton in water bodies.	Specific target organ is not known. Specific target organ system toxicity - single exposure: No effects known.			
OSHA-Ča (Occupational Safety & Health Administration) Substance is not listed. 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. Bioaccumulative potential No further relevant information available. Ecotoxical effects: Remark: Very toxic for aquatic organisms Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.	Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.			
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. Ecotoxical effects: Remark: Very toxic for aquatic organisms Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.	Carcinogenic Calegories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.			
	Toxicity Aquatic toxicity: No further relevant inf Persistence and degradability No furth Bioaccumulative potential No further r Mobility in soil No further relevant infor Ecotoxical effects: Remark: Very toxic for aquatic organism Additional ecological information: General notes: Do not allow material to be released to t Do not allow product to reach ground wa Danger to drinking water if even extreme Also poisonous for fish and plankton in y	relevant information available. mation available. he environment without proper governmental permits. ater, water course or sewage system, even in small quantities. ely small quantities leak into the ground. water bodies.		

Results of PBT and vPvB assessment PBT: Not applicable.

(Contd. on page 4)

Product name: L11039, 2-Amino-5-methylthiazole

(Contd. of page 3)

3 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to ensure prope Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.	er disposal.
4 Transport information	
UN-Number DOT, IMDG, IATA	UN3077
UN proper shipping name DOT IMDG IATA	Environmentally hazardous substances, solid, n.o.s. (2-Amino-5-methylthiazole) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Amino-5- methylthiazole), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Amino-5-
Transport hazard class(es) DOT, IMDG, IATA	methylthiazole)
	0 Minute and a second substances and articles
Class Label Class Label	9 Miscellaneous dangerous substances and articles. 9 9 (M7) Miscellaneous dangerous substances and articles 9
Packing group DOT, IMDG, IATA	111
Environmental hazards: Marine pollutant (IMDG): Special marking (ADR): Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
Special precautions for user EMS Number:	Warning: Miscellaneous dangerous substances and articles F-A,S-F
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Co	
Transport/Additional information: DOT Marine Pollutant (DOT): Remarks: UN "Model Regulation":	No Special marking with the symbol (fish and tree). UN3077, Environmentally hazardous substances, solid, n.o.s. (2-Amino-5- methylthiazole), 9, III
5 Regulatory information Safety, health and environmental regulations/legislation specific for the GHS label elements The product is classified and labeled in accordance with Hazard pictograms GHS07 GHS08 Signal word Warning Hazard statements H373 May cause damage to organs through prolonged or repeated exposure.	substance or mixture h 29 CFR 1910 (OSHA HCS)

- P264
 Wash thoroughly after handling.

 P270
 Do not eat, drink or smoke when using this product.

 P314
 Get medical advice/attention if you feel unwell.

 P300
 Rinse mouth.

 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

 P501
 Dispose of contents/container in accordance with local/regional/national/international regulations.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. 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 Agency 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 directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, and Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, and prohibitive regulations 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.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Product name: L11039, 2-Amino-5-methylthiazole

(Contd. of page 4)

USA

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. Information of the line of the line proper area proper area product on the line and output of the product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department
Date of preparation / last revision 06/30/2016 /
Abbreviations and accompms:

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the 'International Air Transport Association'' (IATA)
ICAO: International Civil Aviation Organization
ICAO: International Air Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Air Transport Association
ITA: International Air Transport Association
IEINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
US0: Lethal concentration, 50 percent
VPVB: very Persistent and very Bioaccumulative
ACGIH: American Chained Transport Association
IAF: International Agery frequences
CAS: Chemical Abstractory (ISA)
IAF: Occupational Safety and Health Administration (USA)
IAF: Occupational Safety and Health Administration (USA)
IAF: Occupational Safety and Health Administration (USA)
IAF: Otcupational Agery for Research on Cancer
EFA: Environmental Protection Agery (USA)
Acute Tox. 4: Acute toxic