

Safety Data Sheet per OSHA HazCom 2012

	Reviewed on 01/30/2013
	dentification
	Product identifier Product name: <b>2-Amino-4-(2-pyridyl)thiazole</b>
	Stock number: H58554
	CAS Number: 20235-26-8 Relevant identified uses of the substance or mixture and uses advised against.
I	Details of the supplier of the safety data sheet
	Manufacturer/Supplier: Nfa Aesar
	Thermo Fisher Scientific Chemicals, Inc. 10 Bond Street
	Vard Hill, MA 01835-8099 Fel: 800-343-0660 Fax: 800-322-4757
	rmail: tech@alfa.com rww.alfa.com
	nformation Department: Health, Safety and Environmental Department Emergency telephone number: Device the second se
	Juring normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.
	Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
	CHS07
	Skin Irrit. 2 H315 Causes skin irritation.
	Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. Iazards not otherwise classified No information known.
	abel elements
	GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) lazard pictograms
(	GHS07
	Signal word Warning Hazard statements
	1315 Causes skin irritation. 1319 Causes serious eye irritation. 1325 Mexesure conjectory irritation.
	7261 Avoid breathing dust/fume/gas/mist/vapours/spray.
	280 Wear protective gloves/protective clothing/eye protection/face protection. 2305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 2304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	<ul> <li>404+P340</li> <li>IF INHALED: Remove person to tresh air and keep comfortable for breathing.</li> <li>405</li> <li>Store locked up.</li> <li>501</li> <li>Dispose of contents/container in accordance with local/regional/national/international regulations.</li> </ul>
	VHMIS classification D2B - Toxic material causing other toxic effects
	$\widehat{\mathbf{T}}$
	Classification system
	IMIS ratings (scale 0-4) Hazardous Materials Identification System)
	Health (acute effects) = 1 $RE \qquad \square$ Flammability = 1
	Exervity Di Physical Hazard = 1 Other hazards
	Results of PBT and vPvB assessment PBT: Not applicable.
	PvB: Not applicable.
(	Composition/information on ingredients Chemical characterization: Substances
	CAS# Description: 0235-26-8 2-Amino-4-(2-pyridyl)thiazole
	First-aid measures
	Description of first aid measures After inhalation Surph virst is frequised, provide artificial respiration. Keen notient worm
	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact
1	mmediately 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)
	(Cond. of page 2) USA

## Product name: 2-Amino-4-(2-pyridyl)thiazole (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: 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: 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. Store in cool, dry place in tightly closed containers. 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: 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 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 aves and exin. 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 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. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Solid Color: Pale brown Not determined Odor: Odor threshold: Not determined. Not applicable. pH-value: Change in condition Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Not determined Not determined Not determined Not determined. Not determined Not determined (Contd. on page 3)

## Product name: 2-Amino-4-(2-pvridvl)thiazole

Page 3/4 Printing date 11/24/2015 Reviewed on 01/30/2013

		sviewed 011 0 1/30/2013
Product name: 2-Amino-4-(2-pyridy)	l)thiazole	
		(Contd. of page 2)
Auto igniting:	Not determined.	
Danger of explosion: Explosion limits:	Not determined.	
Lower:	Not determined	
Upper: Vapor pressure:	Not determined Not applicable.	
Density: Relative density	Not determined Not determined.	
Vapor density	Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water: Partition coefficient (n-octanol/water)	Not determined	
Viscosity:	,	
dynamic: kinematic:	Not applicable. Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known.		
Chemical stability Stable under recom	nmended storage conditions. • <b>to be avoided</b> : Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions Re	Reacts with strong oxidizing agents	
Conditions to avoid No further relevan Incompatible materials: Oxidizing age	ents	
Hazardous decomposition products: Carbon monoxide and carbon dioxide		
Sulfur oxides (SOx) Nitrogen oxides		
11 Toxicological information		
Information on toxicological effects Acute toxicity: No effects known.		
LD/LC50 values that are relevant for o		
Skin irritation or corrosion: Causes sl Eye irritation or corrosion: Causes se	erious eye irritation.	
Sensitization: No sensitizing effects kni Germ cell mutagenicity: No effects kni	nown.	
Carcinogenicity: No classification data	a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects know Specific target organ system toxicity	y - repeated exposure: No effects known.	
Specific target organ system toxicity Aspiration hazard: No effects known.	y - single exposure: May cause respiratory irritation.	
Subacute to chronic toxicity: No effect	cts known.	
Additional toxicological information.	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
12 Ecological information		
Toxicity Aquatic toxicity: No further relevant int	aformation quailabla	
Aquatic toxicity: No further relevant int Persistence and degradability No furth	ther relevant information available.	
Bioaccumulative potential No further I Mobility in soil No further relevant infor	relevant information available.	
Additional ecological information: General notes:		1
Do not allow material to be released to t	the environment without proper governmental permits.	1
Do not allow undiluted product or large of Avoid transfer into the environment.	e quantities to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessmen PBT: Not applicable.	nt	
vPvB: Not applicable.	and the second	
Other adverse effects No further releva	ant information available.	
13 Disposal considerations		
Waste treatment methods Recommendation Consult state, local of	l or national regulations to ensure proper disposal.	1
Uncleaned packagings: Recommendation: Disposal must be m		
·		
14 Transport information		
UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA	··· / ··· //	
Class Packing group	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	ex II of MARPOL73/78 and the IBC Code Not applicable.	(Cartel on page 1)
		(Contd. on page 4)

Safety Data Sheet per OSHA HazCom 2012

Page 4/4 Printing date 11/24/2015 Reviewed on 01/30/2013

USA

	Reviewed on 01/30/20
roduct name: 2-Amino-4-(2-pyridyl)thiazole	·
	(Contd. of page
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	-
Regulatory information	
Safety, health and environmental regulations/leg GHS label elements The product is classified and la Hazard pictograms	<b>gislation specific for the substance or mixture</b> labeled in accordance with 29 CFR 1910 (OSHA HCS)
$\wedge$	
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/m	nist/vanours/sprav
P280 Wear protective gloves/protective	e clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with P304+P340 IF INHALED: Remove person to	nist/vapours/spray. e clothing/eye protection/face protection. th water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. fresh air and keep comfortable for breathing.
P405 Store locked up.	accordance with local/regional/national/international regulations.
National regulations	
to research and development only. This product mus	Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restric ist 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 o This product is not listed on the Canadian Domestic	is the used by or directly under the supervision of a technically qualified individual as defined by TSCA. This or in formulations for commercial purposes. Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).
SARA Section 313 (specific toxic chemical listing California Proposition 65	gs) Substance is not listed.
Prop 65 - Chemicals known to cause cancer Subs	istance is not listed.
Prop 65 - Developmental toxicity Substance is not Prop 65 - Developmental toxicity, female Substan	t listed. nce is not listed
Prop 65 - Developmental toxicity, female Substan Prop 65 - Developmental toxicity, male Substance	e is not listed.
Information about limitation of use: For use only k Other regulations, limitations and prohibitive reg	nulations
Substance of Very High Concern (SVHC) according to Article	ling to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. le 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on t
market and use must be observed.	
Substance is not listed. Annex XIV of the REACH Regulations (requiring a	Authorisation for use) Substance is not listed.
Chemical safety assessment: A Chemical Safety A	Assessment has not been carried out.
Other information	
information to ensure proper use and protect the hea	oplement to other information gathered by them, and should make independent judgement of suitability of this alth and safety of employees. This information is furnished without warranty, and any use of the product not i or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Depart	tment
Abbreviations and acronyms:	ses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR: Accord europeen sur le transport des marchandises dangereus DOT: US Department of Transportation CAS: Chamieol Abstracts Senties division of the American Chamieol	ses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADI: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canad LC50: Lethal concentration, 50 percent	
LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent	
LOSC: Lethal dose, 50 percent UDSC: Lethal dose, 50 percent VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA)	; (USA)
OSHA: Occupational Safety and Health Administration (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)