



1 Identification
Product identifier Product name: <b>2-Chloro-4-iodopyridine-3-carboxaldehyde</b>
Stock number: H50048
CAS Number: 153034-90-3
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.
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
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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
P261 Avoid breathing dust/fume/gas/mist/vapours/sprav
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 up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS classification D2B - Toxic material causing other toxic effects
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Classification system
Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
HEALTH I Health (acute effects) = 1
FIRE I   REACTIVITY I   Physical Hazard = 1
Other hazards Results of PBT and vPvB assessment
PBT: Not applicable.
3 Composition/information on ingredients
Chemical characterization: Substances
CAS# Description: 153034-90-3 2-Chloro-4-iodopyridine-3-carboxaldehyde
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.
After skin contact Immediately wash with water and soap and rinse thoroughly.
Seek immédiate 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)

Information for doctor

5 Fire-fighting measures Extinguishing media

Nitrogen oxides (NOx) Hydrogen chloride (HCI) Hydrogen iodide (HI) Advice for firefighters

7 Handling and storage

Storage

Protective equipment: Wear self-contained respirator.

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(Contd. of page 1) 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. 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 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. 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 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: Not required. 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 context with the everage 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 Check protection of suitable 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 ch General Information Appearance: Form: Odor: Odor threshold:	
pH-value:	Not determined. Not applicable.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined Not determined
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:	Not applicable Not determined. Not determined Not determined

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		(Contd. of page 2
Auto igniting:	Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Lower:	Not determined	
Upper:	Not determined Not applicable.	
Vapor pressure: Density:	Not determined	
Relative density	Not determined.	
Vapor density Evaporation rate	Not applicable. Not applicable.	
Solubility in / Miscibility with		
Water: Partition coefficient (n-octanol/wa	Not determined	
Viscosity:		
dynamic: kinematic:	Not applicable. Not applicable.	
Other information	No further relevant information available.	
0 Stability and reactivity		
Reactivity No information known.		
Possibility of hazardous reactions Conditions to avoid No further rele Incompatible materials: Oxidizing	ons to be avoided: Decomposition will not occur if used and stored according to specifications. s No dangerous reactions known evant information available. agents	
Hazardous decomposition produc Carbon monoxide and carbon dioxic Nitrogen oxides	de	
Hydrogen chloride (HCl) Hydrogen iodide (Hl)		
11 Toxicological information Information on toxicological effec Acute toxicity: No effects known. LD/LC50 values that are relevant to Skin irritation or corrosion: Cause Eye irritation or corrosion: Cause Sensitization: No sensitizing effects Germ cell mutagenicity: No effects	<b>for classification:</b> No data es skin irritation. s serious eye irritation. s known.	
Carcinogenicity: No classification of Reproductive toxicity: No effects M Specific target organ system toxic Specific target organ system toxic Aspiration hazard: No effects know Subacute to chronic toxicity: No effects with the second system toxicity.	data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. known. <b>city - repeated exposure:</b> No effects known. <b>city - single exposure:</b> May cause respiratory irritation. wn.	
2 Ecological information		
Bioaccumulative potential No furth Mobility in soil No further relevant Additional ecological information	further relevant information available. her relevant information available. information available.	
Results of PBT and vPvB assess	I to the environment without proper governmental permits. rge quantities to reach ground water, water course or sewage system. <b>ment</b>	
PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further re	elevant information available.	
	cal or national regulations to ensure proper disposal.	
Uncleaned packagings: Recommendation: Disposal must b	be made according to official regulations.	
<b>4 Transport information</b> Not a hazardous material for transpo	ortation.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es) DOT, ADR, IMDG, IATA Class	None	
Packing group DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
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roduct name: 2-Chloro-4-iodopyridine-3-carboxalde	ehyde
	(Contd. of page 3)
Transport in bulk according to Annex II of MARPOL73/78 a	and the IBC Code Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
	100
5 Regulatory information	
Safety, health and environmental regulations/legislation s GHS label elements The product is classified and labeled in a Hazard pictograms	pecific for the substance or mixture accordance with 29 CFR 1910 (OSHA HCS)
GHS07	
P405 Store locked up. P501 Dispose of contents/container in accordance National regulations This product is not listed in the U.S. Environmental Protection to research and development only. This product must be used product must not be used for commercial purposes or in formu. SARA Section 313 (specific toxic chemical listings) Substa California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is r Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not list Information about limitation of use: For use only by technica Other regulations, limitations and prohibitive regulations Substance of Verv High Concern (SVHC) according to the	not listed. ted. ally qualified individuals. REACH Regulations (EC) No. 1907/2006. Substance is not listed. Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the ation for use) Substance is not listed.
information to ensure proper use and protect the health and sa	o other information gathered by them, and should make independent judgement of suitability of this afety of employees. This information is furnished without warranty, and any use of the product not in ination 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: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal Concentration, 50 percent USD: Lethal Cost Dercent VPW: 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	

IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)