



1 Identification	
Product identifier	
Product name: 2,4-Dichloro-5-nitropyrimidine Stock number: H27644	
CAS Number:	
49845-33-2 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development	
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: Looth, Safet: and Environmental Department	
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	
Hāzard statements H315 Causes skiņ 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 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	
(T)	
Classification system	
HMIS ratings (scale 0-4)	
(Hazardous Materials Identification System)	
FIRE I Flammability = 1 REACTIVITY 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:	
49845-33-2 2,4-Dichloro-5-nitropyrimidine	
4 First-aid measures	
Description of first aid measures After inhalation	
Alter Initiation 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 immediate medical advice.	
After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment.	
(Cor	ntd. on page 2) USA

Product name: 2,4-Dichloro-5-nitropyrimidine (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 Nitrogen oxides (NOx) Hydrogen chloride (HCI) 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 product to reach sewage system or any water course. 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 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 ever 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: Yellow Not determined Odor: Odor threshold: Not determined. pH-value: Not applicable. Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 28-32 °C (82-90 °F) Not determined Not determined > 110 °C (> 230 °F) Not determined. Flash point: Flammability (solid, gaseous) Ignition temperature: Not determined (Contd. on page 3)

Product name: 2,4-Dichloro-5-nitropyrimidine

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		(Contd. of page 2
Decomposition temperature: Auto igniting:	Not determined Not determined.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower: Upper:	Not determined Not determined	
Vapor pressure: Density:	Not applicable. Not determined	
Relative density	Not determined.	
Vapor density Evaporation rate	Not applicable. Not applicable.	
Solubility in / Miscibility with Water:	Not determined	
Partition coefficient (n-octanol/water):		
Viscosity: dynamic:	Not applicable.	
kinematic: Other information	Not applicable. No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known.	mandad stars as additions	
Chemical stability Stable under recomm Thermal decomposition / conditions to	to be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions Rea Conditions to avoid No further relevant	acts with strong oxidizing agents t information available	
Incompatible materials: Oxidizing agen	Its	
Hazardous decomposition products: Carbon monoxide and carbon dioxide		
Nitrogen oxides Hydrogen chloride (HCl)		
, ,		
11 Toxicological information Information on toxicological effects		
Acute toxicity: No effects known.		
LD/LC50 values that are relevant for c Skin irritation or corrosion: Causes sk		
Eye irritation or corrosion: Causes ser	rious eve irritation.	
Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects kno	own. own.	
Carcinogenicity: No classification data Reproductive toxicity: No effects know	on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Specific target organ system toxicity -	- repeated exposure: No effects known	
Specific target organ system toxicity - Aspiration hazard: No effects known.	- single exposure: May cause respiratory irritation.	
Subacute to chronic toxicity: No effect		
`	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 info	ormation available.	
Persistence and degradability No furth	her relevant information available	
Bioaccumulative potential No further re Mobility in soil No further relevant inform	elevant Information available. mation available.	
Additional ecological information: General notes:		
Do not allow undiluted product or large o	quantities to reach ground water, water course or sewage system.	
Avoid transfer into the environment. Results of PBT and vPvB assessment	t	
PBT: Not applicable. vPvB: Not applicable.		
Other adverse effects No further releva	ant information available.	
13 Disposal considerations		
Waste treatment methods		
Recommendation Consult state, local o Uncleaned packagings:	or national regulations to ensure proper disposal.	
Recommendation: Disposal must be ma	ade according to official regulations.	
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)		
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA	Not applicable	
DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards:	Not applicable Not applicable.	
DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards: Special precautions for user	Not applicable	

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Safety Data Sheet per OSHA HazCom 2012

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roduct name: 2,4-Dichloro-5-nitropyrim	nidine
	(Contd. of page
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	-
5 Regulatory information	
Safety, health and environmental regulation GHS label elements The product is classified Hazard pictograms	ns/legislation specific for the substance or mixture I and labeled in accordance with 29 CFR 1910 (OSHA HCS)
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/ P280 Wear protective gloves/pro	
P405 Store locked up.	stective clothing/eye protection/face protection. sly with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. son to fresh air and keep comfortable for breathing.
National regulations	ner in accordance with local/regional/national/international regulations.
to research and development only. This produ product must not be used for commercial purp This product is not listed on the Canadian Don SARA Section 313 (specific toxic chemical	ental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restrict In the seed by or directly under the supervision of a technically qualified individual as defined by TSCA. This poses or in formulations for commercial purposes. The substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). Istings) Substance is not listed.
California Proposition 65 Prop 65 - Chemicals known to cause cance Prop 65 - Developmental toxicity Substance	ir Substance is not listed.
Prop 65 - Developmental toxicity, female Su	ubstance is not listed.
Prop 65 - Developmental toxicitý, male Sub- Information about limitation of use: For use	only by technically qualified individuals
Other regulations, limitations and prohibitin Substance of Very High Concern (SVHC) ad	ve regulations ccording to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the
Substance is not listed.	ining Authorization for weal Cubatance is not listed
Chemical safety assessment: A Chemical Sa	<i>uiring Authorisation for use)</i> Substance is not listed. afety Assessment has not been carried out.
6 Other information	
Employers should use this information only as	s a supplement to other information gathered by them, and should make independent judgement of suitability of this the health and safety of employees. This information is furnished without warranty, and any use of the product not in heet, or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing L Date of preparation / last revision 11/24/201 Abbreviations and acronyms:	15/-
ADR: Accord européen sur le transport des marchandises da DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American C. HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System LC50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent ACGIH: American Conference of Governmental Industrial Hyu OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	ngereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) :hemical Society) n (Canada)
LD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative	
ACGIN: American Conference of Governmental Industrial Hy OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA)	gienists (USA)
IAPC: International Agancy for Pasaarch on Cancor	