

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: 3H321X2 Issue date: 25.01.2024 Version: 1.0

SECTION 1: Identification 1.1. Identification Product form : Substance Substance name 2,6-Dimethylpyridine : CAS-No. 108-48-5 ÷ Product code : 3H32-1-X2 Formula : C7H9N Synonyms : 2,6-Lutidine Other means of identification : MFCD00006345 1.2. Recommended use and restrictions on use Use of the substance/mixture : Laboratory chemicals Manufacture of substances Scientific research and development 1.3. Supplier SynQuest Laboratories, Inc. Inc. P.O. Box 309 Alachua, FL, Alachua, 32615 United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com 1.4. Emergency telephone number Emergency number : (844) 523-4086 (3E Company - Account 10069)

SECTION 2: Hazard(s) identification

GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements		2.2. GHS	Label	elements,	including	precautiona	ry statements
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GHS US labeling

Hazard pictograms (GHS US)

Signal word (GHS US) Hazard statements (GHS US) Warning
 H226 - Flammable liquid and vapor
 H302 - Harmful if swallowed
 H315 - Causes skin irritation

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	H319 - Causes serious eye irritation
	H335 - May cause respiratory irritation
Precautionary statements (GHS US)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P233 - Keep container tightly closed.
	P240 - Ground/Bond container and receiving equipment.
	P241 - Use explosion-proof electrical/ventilating/lighting equipment
	P242 - Use only non-sparking tools.
	P243 - Take precautionary measures against static discharge.
	P261 - Avoid breathing fumes, mist, spray, vapors.
	P264 - Wash skin thoroughly after handling
	P270 - Do not eat, drink or smoke when using this product.
	P271 - Use only outdoors or in a well-ventilated area.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
	P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell
	P302+P352 - If on skin: Wash with plenty of soap and water
	P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse
	skin with water/shower.
	P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312 - Call a POISON CENTER or doctor/physician if you feel unwell
	P321 - Specific treatment (see supplemental first aid instructions on this label)
	P330 - Rinse mouth.
	P332+P313 - If skin irritation occurs: Get medical advice/attention.
	P337+P313 - If eye irritation persists: Get medical advice/attention.
	P362+P364 - Take off contaminated clothing and wash it before reuse.
	P370+P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
	P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
	P403+P235 - Store in a well-ventilated place. Keep cool.
	P405 - Store locked up.
	P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%	GHS US classification
2,6-Dimethylpyridine (Main constituent)	CAS-No.: 108-48-5	≤ 100	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

3.2. Mixtures

Not applicable

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SECTION 4: First-aid measures			
4.1. Description of first aid measures			
First-aid measures general	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move the affected personnel away from the contaminated area.		
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Get immediate medical advice/attention.		
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.		
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.		
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get immediate medical advice/attention.		
4.2. Most important symptoms and effects (acute and delayed)			
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.		

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguishing	media		
	 Alcohol resistant foam. Carbon dioxide. Dry powder. Use extinguishing media appropriate for surrounding fire. Do not use a solid water stream as it may scatter and spread fire. 		
5.2. Specific hazards arising from the chemical			
Fire hazard Explosion hazard	 Thermal decomposition generates: Carbon oxides. Nitrogen oxides. Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed containers. 		
5.3. Special protective equipment and preca	utions for fire-fighters		
Firefighting instructions Protection during firefighting	 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection". 		

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
General measures	: Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe gas, fumes, vapor or spray.		
6.1.1. For non-emergency personnel			
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
Emergency procedures	: Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.		

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6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up		
For containment	: Stop leak if safe to do so. Dike for recovery or absorb with appropriate material.	
Methods for cleaning up	: Take up large spills with pump or vacuum and finish with dry chemical absorbent. Use explosion- proof equipment. Take up small spills with dry chemical absorbent. Sweep or shovel spills into appropriate container for disposal. Ventilate area.	
Other information	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".	
6.4. Reference to other sections		

No additional information available

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling Hygiene measures	 Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 		
7.2. Conditions for safe storage, including any incompatibilities			
Technical measures Storage conditions Incompatible materials Storage area	 Comply with applicable regulations. Keep container closed when not in use. Refer to Section 10 on Incompatible Materials. Store in dry, cool, well-ventilated area. 		

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
2,6-Dimethylpyridine (108-48-5)	
No additional information available	
8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
8.3. Individual protection measures/Perse	onal protective equipment
Hand protection:	
protective gloves. 29 CFR 1910.138: Hand Prote	ection

Eye protection:

Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection

Skin and body protection:

Wear suitable protective clothing

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Respiratory protection:

In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection

Personal protective equipment symbol(s):



Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liguid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: -6 °C
Freezing point	: No data available
Boiling point	: 143 – 145 °C
Flash point	: 37 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,92 g/ml (@ 25 °C)
Molecular mass	: 107,156 g/mol
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

Refractive index

: 1,5 (@ 20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

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10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Keep away from heat, sparks and flame.

10.5. Incompatible materials

Acids. Acid chlorides. Acid anhydrides. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Harmful if swallowed. Not classified Not classified 	
2,6-Dimethylpyridine (108-48-5)		
LD50 oral rat	400 mg/kg (Source: NZ_CCID)	
ATE US (oral)	400 mg/kg body weight	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation Respiratory or skin sensitization	: Causes serious eye irritation. : Not classified	
Germ cell mutagenicity Carcinogenicity	: Not classified : Not classified	
Reproductive toxicity STOT-single exposure	: Not classified : May cause respiratory irritation.	
STOT-repeated exposure Aspiration hazard Viscosity, kinematic	 Not classified Not classified No data available 	
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.	

SECTION 12: Ecological information

12.1. Toxicity		
No additional information available		
12.2. Persistence and degradability		
No additional information available		
12.3. Bioaccumulative potential		
No additional information available		
12.4. Mobility in soil		
No additional information available		

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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations	
13.1. Disposal methods	
Vaste treatment methods Product/Packaging disposal recommendations Additional information	 Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. Dispose of contents/container in accordance with licensed collector's sorting instructions. Recycle the material as far as possible.
SECTION 14: Transport information	
14.1. UN number	
DOT NA No JN-No. (TDG) JN-No. (IMDG) JN-No. (IATA)	: UN1993 : UN1993 : 1993 : 1993
14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Flammable liquids, n.o.s. FLAMMABLE LIQUID, N.O.S. FLAMMABLE LIQUID, N.O.S. Flammable liquid, n.o.s.
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT) Hazard labels (DOT)	: 3 : 3
TDG Transport hazard class(es) (TDG) Hazard labels (TDG)	: 3 : 3
MDG Transport hazard class(es) (IMDG) Hazard labels (IMDG)	: 3 : 3
IATA Transport hazard class(es) (IATA) Hazard labels (IATA)	: 3 : 3

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14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	: III : III : III : III
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT UN-No.(DOT) DOT Special Provisions (49 CFR 172.102) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) DOT Vessel Stowage Location	 UN1993 B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal
TDG UN-No. (TDG)	: UN1993

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TDG Special Provisions	 16 - 1) The technical name of the most dangerous substance related to the primary class must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety Marks. 2) subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical: a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act", 150 - An emergency response assistance plan (ERAP) is required for these dangerous goods under subsection 7.1(6) of Part 7 (Emergency Response Assistance Plan). SOR/2015-100 UN1170, UN1202, UN1203, UN1267, UN1268, UN1863, UN1987, UN1993, UN3295, UN3475, UN3494 SOR/2015-100
Explosive Limit and Limited Quantity Index	: 5L
Excepted quantities (TDG)	: E1
Passenger Carrying Road Vehicle or Passenger	: 60 L
Carrying Railway Vehicle Index	
Emergency Response Guide (ERG) Number	: 128
IMDG Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	 223, 274, 955 5 L E1 LP01, P001 IBC03 T4 TP1, TP29 F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER A
IATA PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provision (IATA) ERG code (IATA)	 E1 Y344 10L 355 60L 366 220L A3 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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15.2. International regulations

CANADA

2,6-Dimethylpyridine (108-48-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

2,6-Dimethylpyridine (108-48-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

2,6-Dimethylpyridine (108-48-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Full text of H-phrases			
H226	Flammable liquid and vapor		
H302	Harmful if swallowed		
H315	Causes skin irritation		
H319	Causes serious eye irritation		
H335	May cause respiratory irritation		
NFPA health hazar	d	: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.	
NFPA fire hazard		: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.	
NFPA reactivity		: 0 - Material that in themselves are normally stable, even under fire conditions.	

Hazard Rating Health

: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

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Flammability Physical	 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II IIIA) 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Safety Data Sheet (SDS), USA	