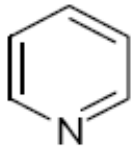
Date of compilation	:	April 03, 2014
File Name	:	0001Gj Ghs11 Div.2 sds Pyridine 1 degree
Revision Number	:	11
Date of Issue	:	February 11, 2021
Revision Due Date	:	January, 2024
Supersedes date	:	March 14, 2019
Supersedes version	:	0001Gj Ghs10 Div.2 sds Pyridine 1 degree

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

PRODUCT NAME	: Pyridine 1 degree
CAS RN	: 110-86-1
EC#	: 203-809-9
SYNONYMS	: Azabenzene, Azine
SYSTEMATIC NAME	: Pyridine
MOLECULAR FORMULA	: C_5H_5N
STRUCTURAL FORMULA	



1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Pyridine is used directly in the denaturation of alcohol (ACGIH 1986; HSDB 1989; NSC 1978) and as a solvent in paint and rubber preparation (ACGIH 1986; HSDB 1989; NSC 1978) and in extracting plant hormones (Santodonato et al. 1985). Pyridine is used as an intermediate in making various insecticides and herbicides for agricultural applications (ACGIH 1986; Harper et al. 1985; Santodonato et al. 1985). Pyridine goes into the production of piperidine (Harper et al. 1985; Santodonato et al. 1985), which is commercially significant in the preparation of chemicals used in rubber vulcanization and agriculture (NSC 1978). Pyridine is also used as an intermediate in the preparation of drugs (antihistamines, steroids, sulfa-type and other antibacterial agents) dyes, water repellents, and polycarbonate resins (ACGIH 1986; Harper et al. 1985; NSC 1978; Santodonato et al. 1985). Kindly revert for details.

Uses advised against: None

1.3. Details of the supplier of the safety data sheet

Jubilant Ingrevia Limited
FACTORY & REGISTERED OFFICE: Jubilant Ingrevia Limited, Bhartiagram, Gajraula, District: Amroha, Uttar Pradesh-244223, India
T +91-5924-252353 to 252360 Contact Department-Safety: Ext. 7424 F: +91-5924-252352.
Emergency number: +91-9997022412; +91-9359674864

HEAD OFFICE: Jubilant Ingrevia Limited, Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh, 201301 - India
T +91-120-4361000 - F +91-120-4234881 / 84 / 85 / 87 / 95 / 96 support@jubl.com - www.jubilantingrevia.com

1.4. Emergency telephone number

CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS:

North America: 1-800-255-3924
International: +1-813-248-0585
India: 000-800-100-4086
Brazil: 0-800-591-6042
Mexico: 01-800-099-0731

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the substance or mixture

GHS-US classification
Flammable Liquid: Category 2
Acute Toxicity Dermal: Category 4
Acute Toxicity Inhalation: Category 4
Acute Toxicity Oral: Category 4
Skin corrosion/ irritation: Category 2
Serious eye damage/eye irritation: Category 2

2.2. Label Elements

Hazard Pictogram: GHS02; GHS 07

Signal Word: Danger!

HAZARD AND PRECAUTIONARY STATEMENTS:

HAZARD STATEMENTS

- H225: Highly flammable liquid and vapour.
- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H332: Harmful if inhaled.
- H315: Causes skin irritation
- H319: Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

- P241 Use explosion-proof electrical/ventilating/light/…/equipment
- P210: Keep away from heat/sparks/open flames/... /hot surfaces.... No smoking.
- P243: Take precautionary measures against static discharge.
- P264: Wash thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P260: Do not breathe dust/fume/gas/mist/vapours/spray.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P233: Keep container tightly closed.
- P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: If eye irritation persists: Get medical advice/ attention.
- P321: Specific treatment (see on the label).
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P405: Store locked up.
- P501: Dispose of contents/container to local/regional/national/international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical	CAS #	EC No.	Purity	GHS CLASSIFICATION
Pyridine 1 degree	110-86-1	203-809-9	~ 100%	Flammable Liquid: Category 2 Acute Toxicity Dermal: Category 4 Acute Toxicity Inhalation: Category 4 Acute Toxicity Oral: Category 4 Skin corrosion/ irritation: Category 2 Serious eye damage/eye irritation: Category 2

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Key symptoms

Acute effects

- Pyridine is irritating to skin, eyes and respiratory system. It is harmful if swallowed, contact with skin and if inhaled. Acute symptoms for eyes are redness and pain, for skin are redness and burning sensation and in the condition of ingestion, abdominal pain, diarrhea, weakness and effects on CNS may be delayed.

Chronic effects:

- Effects on liver and kidney.

4.2. FIRST AID

- **Eyes**: If in eyes rinse cautiously with water for at least 15 minutes. Remove contact lenses if easy to do so. Continue rinsing. If eye irritation persists get medical attention.
- **Dermal/Skin:** If on skin or hair, IMMEDIATELY remove all contaminated clothing and rinse/shower with plenty of water. If any irritation persists get medical attention. Wash contaminated clothing and clean shoes before reuse.
- **Inhalation:** If inhaled remove to fresh air and keep at rest in a position comfortable for breathing. Monitor for respiratory distress. Apply artificial respiration if not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration

with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Toxic vapours may be released on thermal decomposition including nitrogen oxides, carbon monoxide and cyanide.

- **Ingestion**: If swallowed call a poison center if you feel unwell. Rinse mouth. Do NOT induce vomiting by use of emetics.
- **Notes to physician:** treat symptomatically and supportively. Keep under observation. Contact a poison center for advanced treatment.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

- *Appropriate extinguishing media*: Dry chemical powder, carbon dioxide, and alcohol resistant foam. Water may also be used. Water sprays can be effective in cooling down the fire-exposed containers and knocking down the vapours. Water jets may be used to flush spills away and dilute the same to non-flammable mixtures.

5.2. Special Protective Equipment and Precautions for Fire Fighter

- Evacuate the area and fight fires from a safe distance.
- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions or as per locally valid procedures.
- Fire fighters must wear Self Contained Breathing Apparatus (SCBA) and full protective clothing. The chemical is harmful in contact with skin.
- Report any run-off of fire waters contaminated with this chemical as per local and federal procedures applicable.

5.3. Unusual fire and explosion hazard

- Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide and cyanide.
- High vapor concentration may result in an explosion hazard.
- Vapors are heavier than air. May travel considerable distance from source and flashback.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Eliminate all source of ignition. All equipment used for handling must be grounded. Use clean non-sparking tools.
- Large spills involve many small leaking package of greater than 200 liters, such as a cargo tank or portable tank.
- Remove unauthorized personnel from the area.
- Wear full protective equipment as per section 8.
- Do not touch or walk through spilled material.
- Stop leak if can do so without risk.

Minor Spills

- Clean up all spills immediately following relevant Standard Operating Procedures.
- Avoid breathing vapors and contact with skin and eyes.
- Shut off leak source if possible.
- Shut off all possible sources of ignition.
- Wear protective clothing, boots, impervious gloves and safety glasses.
- Wipe up.
- Decontaminate all equipment.
- Use non-sparking tools.

Major Spill

- Alert Emergency Responders and tell them location and nature of hazard.
- Shut off all possible sources of ignition and increase ventilation.
- Wear protective clothing, full boots, impervious gloves, safety glasses and Self-Contained Breathing Apparatus (SCBA), as may be deemed appropriate.
- Clear area of personnel and move upwind.
- Dike far ahead of spill for later disposal.
- Water spray may be used to reduce vapors but may not prevent ignition in closed spaces.
- Stop leaks if possible.
- Prevent, by any means available, spillage from entering drains or water and watercourses.
- Collect recoverable product into labeled containers for recycling, recovery or disposal.
- Contain spill with sand, earth or vermiculite.
- Spread area with lime or absorbent material, and leave for at least 1 hour before washing.
- Clean up all tools and equipment.
- Inform authorities in event of contamination of any public sewers, drains or water bodies.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

- Use good occupational work practice.
- Avoid breathing vapours and contact with skin and eyes.
- Avoid smoking, naked lights or ignition sources.
- Wear protective gloves, eye/face protection and protective clothing.
- Ground and secure containers when dispensing or pouring product.
- Use explosion proof equipment and non-sparking tools.

- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Wash hands thoroughly after usage
- Launder contaminated clothing before re-use.
- Use in a well-ventilated place/Use protective clothing commensurate with exposure levels.
- If on skin or hair, IMMEDIATELY remove all contaminated clothing and rinse/shower with plenty of water.

Storage

- Store in a cool, well ventilated place
- Store in a flame proof area
- Store away from incompatible materials, away from direct light.
- Keep securely closed when not in use.
- Store at ambient conditions. Do not exposure to moist conditions.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

- **Exposure Limits Values**

Exposure Limits 1 ppm= 3.235 mg/m^3

Source	TWA	TWA	STEL	STEL
	ppm	mg/m3	ppm	mg/m3
Australia Exposure	5	16		
Belgium OELs	5	16		
Canada - Alberta OELs	5	14		
Canada - Ontario	1			
Canada - Quebec	5	16		
China (Hong Kong)	5	16		
China OEL Workplace		4		10
Denmark	5	16		
Estonia OELs	5	16	11	35
Finland Occupational	5	16	10	33
France VLE/VME	5	16	10	33
Germany MAK	5	16		
Germany TRGS 900	5	16		
Greece OELs	5	16	10	32
Hungary OELs	5		10	
Iceland OELs	5	15		
India PELs (Work)	5	15	10	30
Ireland OELs	5	15	10	
Malaysia Permissible	5	16		
Netherlands OELs	0.3	0.9		
New Zealand WES	5	16		
NIOSH RELs	5			
Philippines OELS	5			
Portugal OELs	5			
Russia OELs	5			
Singapore Pels	5	16		
Spain OELs	5	15		
Sweden OEL	2	7	3	10
Switzerland OELs	5	15	10	30

Taiwan	5	16		
Turkey WELs	5	15		
UK OES	5	16	10	33
UK WELS	5	16	10	33
US - NY OELs	1			
US ACGIH TLV 2001	5			
US OSHA PELs	5	15		

- IDLH (Immediately Dangerous To Life & Health): 1000ppm (NIOSH 1997)
- TEEL-1: The maximum airborne concentration below which it is believed that nearly all individuals could be exposed without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor.
- TEEL-2: The maximum airborne concentration below which it is believed that nearly all individuals could be exposed without experiencing or developing irreversible or other serious health effects or symptoms, which could impair an individual's ability to take protective action.
- TEEL-3: The maximum airborne concentration below which it is believed that nearly all individuals could be exposed without experiencing or developing life-threatening health effects.

Pyridine data:
TEEL 1: 15 ppm; TEEL 2: 25 ppm; TEEL 3: 1000ppm

Exposure Controls

- Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. Local ventilation is usually preferred. Ensure that eyewash stations and safety showers are close to the workstation location.

.Personal Protection

- Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
- **Eyes**: Safety goggles/ Chemical Safety glasses and Face shield.
- **Clothing**: Boots and clothing to prevent contact.
- **Respirator:** Follow a respiratory program that may be locally applicable such as OSHA 1910.134 or EN 149. Always use an approved respirator. Air purifying respirators will not work in oxygen deficit areas. Use an appropriate filter (Type A or K under EN 149 for organic chemicals).
- **Hands:** Wear appropriate protective gloves to prevent skin exposure.
  Protective gloves:
  Material ratings: Check manufactures data
  Butyl>3 hrs
  Neop/natural rubber<1 hr
  PE Gloves: 1-3 hrs
  PE/EVAL/PE>3 hrs
  Responder fabric>3 hrs
- **Feet:** Safety Boots

General Industrial hygiene:

- Immediately change contaminated clothing
- Apply skin protective barrier cream
- Wash hands and face after working with the substance
- Under no circumstances eat or drink at the workplace
- Do not inhale substances, work under hood.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

- **Information on basic physical and chemical properties.**

Sr.No.	Parameter	Typical value
1.	Appearance	Colorless to pale yellow liquid
2.	Odor	Fish like nauseating odor
3.	Odor Threshold	0.23 ppm (low)-1.9 ppm
4.	pH	8.5
5.	Melting point/Freezing point	(-) 42.2 °C
6.	Boiling Point	115.3 °C

7.	Flash point	20^{0}C closed cup (68^{0}F)
8.	Evaporation rate (n-BuAc=1)	1.37 (n-Butyl acetate= 1)
9.	Flammability	Highly flammable liquid
10.	Upper/lower flammability or Explosive limits	1.8%-12.4% v/v in air
11.	Vapor pressure	2.0 kPa @20°C
12.	Vapor density (air=1)	2.73 (Air=1)
13.	Relative density	0.98
14.	Solubility	Soluble in alcohols, ether and hydrocarbons.
15.	Partition coefficient : n-(Octonol / water)	0.65
16.	Auto-ignition temperature	482.2°C (900^{0}F)
17.	Decomposition temperature	Not available
18.	Viscosity	0.94 x10-3 Pa.s
19.	Explosive property	Not available
20.	Oxidizing property	Not available
21.	pKa (@250C)	5.23
22.	Molecular weight	79.1
23.	Azeotrope	Azeotrope with3m/m water b.p.92-30C

SECTION 10: STABILITY AND REACTIVITY

- **Stability:** Stable under normal conditions of temperature.
- **Conditions to avoid:** Static discharges, high temperatures, incompatible chemicals, direct light, moist conditions.
- **Incompatible chemicals:** Strong oxidizing agents, strong acids. Pyridine reacts violently with chlorosulfonic acid, chromic acid, maleic anhydride, nitric acid, Fuming sulfuric acid, perchromates, beta-propiolactone, silver perchlorate, & sulfuric acid.
- **Transport compatibilities:** Compatible to s.steel (314/316), cast iron and PTFE.
- Severe effect with viton, neoprene and natural rubber.
- **Hazardous decomposition:** Gives off fumes of cyanide on hazardous decomposition. (ILO) . May give of fumes of nitrogen oxides, cyanide, carbon monoxide and toxic and irritating fumes on decomposition.
- **Hazardous Polymerization**: Not expected.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: dust, mist: Harmful if inhaled.

Pyridine (110-86-1)	
LD50 oral rat	1.58 g/kg
LD50 oral	891 mg/kg
LD50 dermal rabbit	1121 mg/kg bw/day
LC50 inhalation rat (mg/l)	9000 ppm 1h
LC50 inhalation rat (ppm)	4000 ppm/4h

Skin corrosion/irritation : Causes skin irritation.
pH: 8.5 (0.2 M aqueous solution)

Serious eye damage/irritation : Causes serious eye irritation.
pH: 8.5 (0.2 M aqueous solution)

Respiratory or skin sensitisation : Skin sensitization

Germ cell mutagenicity : No information is available and no adverse mutagenic effects are anticipated (No classification for mutagenicity as none of the components is classified for mutagenicity)

Carcinogenicity : Not classified
ACGIH A3 - Confirmed animal carcinogen with unknown relevance to humans

Pyridine (110-86-1)	
NOAEL (chronic, oral, animal/male, 2 years)	7 mg/kg bodyweight

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Respiratory tract irritation. Causes damage to organs (central nervous system, kidney, liver, respiratory system, testes).

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Pyridine (110-86-1)	
LC50 fish 1	100 mg/l 96h Species: Fathead minnow (Pimephales promelas)
EC50 Daphnia 1	61.8 - 86.04 mg/l 72h Species: Water flea (Ceriodaphnia dubia)

12.2. Persistence and degradability

Pyridine (110-86-1)	
Persistence and degradability	Photochemical degradation: Hydroxyl rate constant: 3.7x10-13 cm3-molecule/sec (exp). Atmospheric half-life: 43 days.

12.3. Bioaccumulative potential

Pyridine (110-86-1)	
Bioconcentration factor (BCF REACH)	88
Log Pow	0.65 at 20 Deg. C
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

Pyridine (110-86-1)	
Mobility in soil	The Koc of pyridine is estimated as 50, using a measured log Kow of 0.65 and a regression-derived equation. According to a classification schem, this estimated Koc value suggests that pyridine is expected to have high mobility in soil. The pKa of pyridine is 5.23, which indicates that pyridine will partially exist in the protonated form under acidic conditions and cations adsorb more strongly to soil surfaces than neutral molecules. The adsorption of pyridine to a basic subsoil (pH 8.15, 0.58% organic carbon) is negligible, while in an acidic subsoil (pH 4.85, O.24% organic carbon), the Freundlich adsorption constant was measured to be 5.78 and the slope 0.679. This suggests a cationic adsorption mechanism as pyridine is predominantly in its protonated form. Pyridine adsorbs to colloidal particles of sodium montmorillonite and kaolinite, a process which is attributed to cation exchange and is a function of pH. Adsorption is at a minimum at pH 1 and 11 and reaches a maximum at pH 4 for the montmorillonite and pH 5.5 for the kaolinite where the adsorption constants are 60 and 10, respectively.

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

- **Important:** Always check for local and federal laws that may be applicable. Obtain the help of a professional, if required. Waste may be classified as toxic and ignitable.
- **Classification:** This chemical may be classified as a hazardous waste. In USA generators of waste involving this chemical classified as U196 (Pyridine), F005 and D038 will have to conform to laws applicable for storage, transport, treatment and disposal.
- **Disposal Methods:**
- Landfill: Will not be recommended in most circumstances. In USA under the Toxicity Characteristic Leaching Procedure (TCLP) the waste will carry the waste code for pyridine if the TCLP levels exceed 5%. 40 chemicals including pyridine are currently listed in this procedure. Incineration: Controlled incineration whereby the nitrogen oxides are removed by scrubbing, catalytic or thermal means is recommended. A suitable solvent may be considered for dilution, which may be fed to an incineration unit equipped with an after burner and scrubber. A

potential candidate for rotary kiln incineration at a temperature range of 820 to 1,600 deg C and residence times of seconds for liquids and gases, and hours for solids. A potential candidate for liquid injection incineration at a temperature range of 650 to 1,600 deg C and a residence time of 0.1 to 2 seconds. A potential candidate for fluidized bed incineration at a temperature range of 450 to 980 deg C and residence times of seconds for liquids and gases, and longer for solids. [USEPA; Engineering Handbook for Hazardous Waste Incineration p.3-15 (1981) EPA 68-03-3025]

- Photolysis: Photolysis of pyridine at low pH that may be catalytically or oxygen assisted may be used to dispose pyridine. [United Nations. Treatment and Disposal Methods for Waste Chemicals (IRPTC File). Data Profile Series No. 5. Geneva, Switzerland: United Nations Environmental Program, Dec. 1985. 274]
- **Precautions**: Laws may be applicable to containers and equipment rinsates. Disposal procedures and methods must take into account the toxicity and flammability hazard.
- Exert extra care in igniting, as this material is highly flammable.
- Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: TRANSPORT INFORMATION

- This substance is considered to be hazardous for transport by Air/Road and Sea and thus regulated by IMO/ IMDG/ IATA/ ICAO/ US DOT.

S.No	Agency	UN Number	Proper Shipping name	Hazard Class	Packing Group
Land Transport	DOT	UN 1282	Pyridine	**3** Flammable liquid.	II
Maritime Transport	IMDG	UN 1282	PYRIDINE	**3** Flammable liquid.	II
Air Transport	IATA	UN 1282	Pyridine	**3** Flammable liquid.	II
Hazard Label					
Hazchem	2WE (Applicable for surface transport in India. UK, Australia and several countries)				
Air Transport	ERG Code: 3L				
Marine Pollutant	This chemical is not a marine pollutant but is nevertheless harmful to the environment.				

SECTION 15: REGULATORY INFORMATION

- **European Union Information**

EC# 203-809-9

Classification as per CLP Regulation 1272/2008:

- Flam. Liq. 2; Acute Tox(Oral/Dermal/Inhalation) Cat 4; Skin corrosion/ irritation: Cat. 2; Serious eye damage/eye irritation: Cat. 2
- **Hazards Statements:** H225; H302; H312; H332; H315; H319

US information

- **TSCA Inventory:** CAS RN 110-86-1 present
- **RTK lists:** Pyridine can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota &Massachusetts.
- **California Prop 65:** Present
- **Clean Air Act:** CAS# 110-86-1 does not contain any hazardous air pollutants.
  This material does not contain any Class 1 or 2 Ozone depletory substances.
- **Clean Water Act:**
  CAS# 110-86-1 is not listed as a Hazardous Substance under the CWA.
  CAS#110-86-1 is not listed as a Priority Pollutant under the CWA.
  CAS#110-86-1 is not listed as Toxic Pollutant under the CWA.
- **CERCLA Chemical:** Yes **CERCLA RQ lbs:** 1000
- **EPCRA EHS Chemical:** No **EPCRA TPQ lbs:** Not applicable

- **EPCRA 313 Chemical:** Yes **RCRA : U196 CHRIS:** PRD
- **Inventories**
  Present on the Inventories of most countries. Revert for specific information. Australia Inventory of Chemical Substances (AICS).
- **Canada**
  Canada Domestic Substances List (DSL).
  Canada Ingredient Disclosure List (SOR/88-64).
- **China**
  China Dangerous Chemicals Names List.
  China Inventory of Existing Chemical Substances.
- **New Zealand**
  NZ: Pyridine 110-86-1 Classification HSNO: 3.1B, 6.1C,6 3B 6 9A 9 1B 9 3B
- Philippines Inventory of Chemicals and Chemical Substances (PICCS)
- Switzerland Giftliste (List of Toxic Substances) 1
- Taiwan List of Announced Toxic Chemical Substances
- Thailand Harmful Chemicals - List I

SECTION 16: OTHER INFORMATION

a) Compilation information of safety data sheet

Date of compilation	: April 03, 2014
Chemical	: Pyridine 1 degree
CAS #	: 110-86-1
File Name	: 0001Gj Ghs11 Div.2 sds Pyridine 1 degree
Revision Number	: 11
Date of Revision	: February 11, 2021
Revision Due Date	: January, 2024
Supersedes date	: March 14, 2019

b) A key or legend to aberrations and acronyms used in the safety data sheet

- PBT =Persistent Bio accumulative and Toxic.
- vPvB= Very Persistent and Very Bio accumulative.
- SCBA= Self Contained Breathing Apparatus.
- RTECS= Registry of Toxic Effects of Chemical Substances.
- NTP=National Toxicology Program.
- IARC= International Agency for Research on Cancer.
- EPA=Environmental Protection Agency.
- TSCA= Toxic Substances Control Act.
- CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act.
- SARA= Superfund Amendments and Reauthorization Act.
- NFPA= National Fire Protection Association.
- WHIMS= Workplace Hazardous Materials Information System.
- DSL/NDSL= Domestic/Non-Domestic Substances List.
- CSR=Chemical Safety Report.
- BCF = Bio Concentration Factor.
- DNEL = Derived No Effect Level.
- PNEC = Predicted No Effect Concentration.
- TLV = Threshold Limit Value.
- ACGIH = American Conference of Governmental Industrial Hygienists.
- REACH = Registration, Evaluation Authorization and Restriction of Chemicals.
- CLP = Classification, Labelling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonized System.
- ADR = Accord European relative au transport international de merchandises.
- IMDG-Code = International Maritime Code for Dangerous Goods.
- ICAO = International Civil Aviation Organization.
- IATA/DGR= International Air Transport Association/Dangerous Goods Regulation.

c) Key Literature reference and sources for data

Biographical reference and data sources

- Globally Harmonized System of Classification and Labelling of Chemicals.
- CLP REG (regulation) (EC) no. 1272/2008, last modification by regulation (EC) no. 790/2009.
- National Library of Medicine, Department of Health and Human Services, Hazardous Substances Data Bank (HSDB)
- Verschueren, Karel; Environmental Data on Organic Chemicals; 3rd Ed.; Van Nostrand Reinhold 1996
- IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, WHO International Research on Cancer.
- Pyridine and Pyridine Derivatives High Production Volume (HPV) Chemicals Category Assessment of Data Availability and Test Plan December 17,2003.
- APCISS

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

(End of Safety Data Sheet)