

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product code TS-27530 Product name Pyridine

Company/undertaking identification

Life Technologies Corporation 5781 Van Allen Way PO Box 6482 Carlsbad, CA 92008 +1 760 603 7200 Life Technologies 5250 Mainway Drive Burlington, ONT CANADA L7L 6A4 800/263-6236

Thermo Fisher Scientific Pierce Biotechnology P.O. Box 117 Rockford, IL 61105 United States 1.815.968.0747 or 1.800.874.3723

24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and

[or Dangerous Goods] Incident. Spill, Leak, Fire, 1-703-527-3887

Exposure, or Accident. Call CHEMTRECOutside the USA + Canada: 1-703-741-5970

Country Specific Emergency Number (if available):

For research use only. Not for use in diagnostic procedures

SECTION 2: Hazards identification

GHS Classification

Signal Word DANGER

Hazard pictograms

Revision date28-Jun-2020Page 1/9Product codeTS-27530Product name Pyridine



Health hazards

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute inhalation toxicity - vapor	Category 4

Physical hazards

GHS Physical Hazard	Flammable liquids
GHS Physical Hazard Category Number	Category 2

Environmental hazards

Not Hazardous

Hazard Statements

H225 - Highly flammable liquid and vapor

H302 - Harmful if swallowed

H332 - Harmful if inhaled

H312 - Harmful in contact with skin

Precautionary Statements

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash hands thoroughly after handling

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P270 - Do not eat, drink or smoke when using this product

Response

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Storage

P403 + P235 - Store in a well-ventilated place. Keep cool

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

Not Applicable

HMIS

<u> </u>	
Health	1
Flammability	3

Revision date 28-Jun-2020 Product code TS-27530

Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS No.	Common name	EINECS-No	Weight-%
Pyridine	110-86-1	-	203-809-9	98-100

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Remove and

wash contaminated clothing and gloves, including the inside, before re-use.

Immediate medical attention is required.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Immediate medical attention is required.

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting

without medical advice. Get medical attention if symptoms occur.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist,

call a physician.

Notes to Physician Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H225 - Highly flammable liquid and vapor H302 - Harmful if swallowed H332 - Harmful if inhaled H312 - Harmful in contact with skin

Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical. No information available.

Special hazards arising from the substance or mixture

None known

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Avoid contact with skin, eyes or clothing
Use personal protection equipment
See section 8 for more information

Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Always wear recommended Personal Protective Equipment. See section 8 for more information. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

L	Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
	Pyridine	5 ppm 15 mg/m³	None	1 ppm	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Pyridine	4 ppm	None	None
	12 mg/m ³		

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection In case of insufficient ventilation wear respirators and components tested and

approved under appropriate government standards.

Revision date28-Jun-2020Page 4/9Product codeTS-27530Product name Pyridine

www.thermofisher.com

Hand protection Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye protection Tight sealing safety goggles.

Skin and Body Protection Wear suitable protective clothing.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance liquid

Odor characteristic, Strong

Odor Threshold <1 ppm Molecular Weight No data pH 8.5

Melting point / melting range°C -41.6°F -42.9Boiling point / boiling range°C 115.3°F 239.54Flash point°C 20°F 68Autoignition Temperature°C 482°F 899Decomposition temperature°C No data°F No data

Evaporation rate

1.37 (butyl acetate = 1)

Flammability (solid, gas) Extremely flammable in the presence of the following materials or conditions: open

flames, sparks and static discharge and heat.

HIGHLY FLAMMABLE:

Will be easily ignited by heat, sparks or flames.

Vapors may travel to source of ignition and flash back.

Most vapors are heavier than air. They will spread along ground and collect in low

or

confined areas (sewers, basements, tanks).

Many liquids are lighter than water. Containers should be grounded.

Upper explosion limit 12.4% Lower explosion limit 1.8%

Vapor Pressure 2 kPa (15 mm Hg) [room temperature]

Vapor density 2.73 [Air = 1]
Relative density 0.9819
Specific gravity No data

Solubility Easily soluble in the following materials: cold water and hot water.

Soluble in the following materials: methanol and diethyl ether.

Partition coefficient: 0.64

n-octanol/water

ViscosityNo dataExplosive propertiesNo dataOxidizing propertiesNo data

Other information

No data.

Revision date 28-Jun-2020 Product code TS-27530 Product name Pyridine

SECTION 10: Stability and reactivity

Reactivity None known.

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

Hazardous reaction has not been reported.

Conditions to avoid Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition. Do

not allow

vapor to accumulate in low or confined areas.

Incompatible materials Oxidizing agent.

Hazardous decomposition

products

No known hazardous decomposition products.

SECTION 11: Toxicological information

Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Pyridine	= 891 mg/kg (Rat) = 866 mg/kg	No data available	=28500mg/m ³ (Rat)
-	(Rat)		=12.898mg/L(Rat)

Principal Routes of Exposure

Acute toxicity May be harmful if swallowed, inhaled, or absorbed through skin.

Skin corrosion/irritation Data are conclusive but insufficient for classification

Serious eye damage/irritation Data are conclusive but insufficient for classification

Respiratory or skin

sensitization

Data are conclusive but insufficient for classification

Specific target organ toxicity Data are conclusive but insufficient for classification

(STOT) - single exposure

Specific target organ toxicity Data are conclusive but insufficient for classification

(STOT) - repeated exposure

Carcinogenicity Data are conclusive but insufficient for classification

Germ cell mutagenicity Data are conclusive but insufficient for classification

Reproductive toxicity Data are conclusive but insufficient for classification

Aspiration hazard Data are conclusive but insufficient for classification

SECTION 12: Ecological information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Pyridine	Tetrahymena	Daphnia magna	No data available	No data available	logPow0.65
	pyriformis EC50=520	EC50=520 mg/L (24			
	mg/L (24 h)	h)			

Mobility in soil No information available.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Classified as dangerous in the meaning of transport regulations

UN number 1282
UN proper shipping name Pyridine
Transport hazard class(es) 3
Packing group II

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

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

Not Applicable.

Revision date28-Jun-2020Page 7/9Product codeTS-27530Product name Pyridine

SECTION 15: Regulatory information

Component	US TSCA
Pyridine	Listed
110-86-1 (98-100)	

US Federal Regulations

SARA 313

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers.

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold
			<u>Values</u>
Pyridine	110-86-1	98-100	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical Name	CAS No.	<u>Weight-%</u>	<u>Category</u>
Pyridine	110-86-1	98-100	Carcinogen

WHMIS Hazard Class

B2 - Flammable liquid

D1B - Toxic materials

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

Chemical Name	CAS No.	Brazil - National Agency for Sanitary Surveillance (ANVISA)	Brazil - National List of Carcinogen Agents to Humans (LINACH)
Pyridine	110-86-1	Not Listed	Not Listed

SECTION 16: Other information

Reason for revision SDS sections updated.

Revision number 2

Revision date 28-Jun-2020

Revision date 28-Jun-2020 Product code TS-27530 Product name Pyridine

For research use only. Not for use in diagnostic procedures.

References

- ECHA: http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- eChemPortal: http://www.echemportal.org/
- LOLI database: https://www.chemadvisor.com/loli-database

Abbreviations and acronyms

TWA - Time-Weighted Average

OELs - Occupational Exposure Limits

STEL - Short Term Exposure Limit

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

CEPA - Canadian Environmental Protection Act

EPA - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labor

IATA - International Air Transport Association

DOT - Department of Transportation

IMDG - International Maritime Dangerous Goods

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

AIHA - American Industrial Hygiene Association

HMIS - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet
