Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Isoleucine USP (L)
Commercial Name Not available.
Product Use Various use (drugs, nutritional, industrial)
Restrictions On Use Not available

Product Code 30-3640

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Not available

Signal Word NON-HAZARDOUS

Hazard Statement(s) Not available.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Not available
Response Not available
Storage Not available
Disposal Not available

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components L-Isoleucine
% By Weight 100
CAS# 73-32-5
Molecular Weight 131.17 g/mole
Chemical Formula C6H13NO273-32-5
Synonym(s) 2-Amino-3-methylvaleric acid, (2S,3S)-(+)-Isoleucine;Ile;I;Isoleucine;L-2-Amino-3-methylvaleric acid; L-Isoleucine;(2S)-2-Amino-3-methylpentanoic acid

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
L-Isoleucine	73-32-5	100	Not available	Not available

Section 4: First-Aid Measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist
Skin Contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye Contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Symptoms/Effects	
Acute	Gastrointestinal disturbances
Delayed	Gastrointestinal disturbances

Immediate Medical Attention

Provide general supportive measures and treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water. Foam. Dry chemical or CO2. Use fire-extinguishing media appropriate for surrounding materials

Unsuitable Extinguishing Media

Not available.

Products of Combustion

No unusual fire or explosion hazards noted.

Firefighters Special Equipment and Precautions

Wear suitable protective equipment. Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing Use standard firefighting procedures and consider the hazards of other involved materials

Section 6: Accidental Release Measures

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS. Methods and materials for containment and cleaning up: Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Handling: As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential. Storage: Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Not available.
Engineering Controls	For laboratory operations, use good technique and limit open handling. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.

Personal Protection	Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Skin protection Hand protection: Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Other: Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respiratory protection: Respirators are generally not required for laboratory operations. Choose respiratory protection appropriate to the task and the level of existing engineering controls. Thermal hazards: Wear appropriate thermal protective clothing, when necessary. General hygiene consideration: Handling practices in this SDS are recommendations for laboratory use of reference standards. Procedures for any other uses or quantities should be determined after an appropriate assessment.

Section 9: Physical and Chemical Properties

Appearance	White solid. (Powdered solid)
Odor	Practically Odorless
Odor Threshold	Not available

Melting Point	Sublimes at 168-170 °C	**pH**	in aqueous solution 5.5 - 7 Solutio
Freezing Point	Not available	**Vapor Pressure**	< 0.0000001 kPa (77 °F (25 °C))
Boiling Point/Range	Not available	**Vapor Density**	Not available.
Decomposition temperature	Not available	**Viscosity**	Not available.
Partition Coefficient: n-octanol/water	-1.7	**Evaporation Rate**	Not available
Flash Point	Not available.	**Autoignition temperature**	Not available
Flammability	Not available.	**Flammability or Explosive Limits:**	
		Lower	Not available
		Upper	Not available

Solubility(ies)	Sparingly soluble in water.
Other	Acetic acid: Sparingly soluble. Alcohol: Sparingly soluble. Ether: Insoluble. Chemical family Alpha-amino acid. Molecular formula C6H13NO2 Molecular weight 131.17

Section 10: Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical Stability	Material is stable under normal conditions
Hazardous Polymerization	No dangerous reaction known under conditions of normal use
Conditions to Avoid	Contact with incompatible materials
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions

Section 11: Toxicological Information

RTECS NR4705000

Acute Toxicity
Acute Inhalation LC50 Rat > 5410 mg/m³ Oral LD50 Rat > 2000 mg/kg

Skin Corrosion/Irritation
Not available

Serious Eye Damage/Irritation
Not available

Respiratory or Skin Sensitization
Not available

Germ Cell Mutagenicity
Not available

Carcinogenicity
Not available

Reproductive Toxicity
Not available

Routes of Entry
Not available.

Symptoms Related to Exposure
Gastrointestinal disturbances

Potential Health Effects
Not available.

Target Organ(s) Not available

Section 12: Ecological Information

Ecotoxicity
he product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistance and Degradability
Not available.

Bioaccumulative Potential
Octanol/water partition coefficient log Kow -1.7 0.7

Mobility in Soil
Not available

Other Adverse Effects
Not available

Section 13: Disposal Considerations

Waste Disposal
Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Disposal of Container
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Other Considerations
Not available

Section 14: Transport Information

DOT Classification
Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information

Regulations
US federal regulations: This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 Toxic Substances Control Act (TSCA) TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. SARA 302 Extremely hazardous substance Superfund Amendments and Reauthorization Act of 1986 (SARA) Not listed. NoSARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Not regulated.Safe Drinking Water Act (SDWA) US state regulations California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

Other
Not available

Section 16: Other Information

Not available