

**Section 1 – Product and Company Identification**
**1.1 Manufacturer Information**

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**1.2 Product Information**

Product Name: INT-PYD Standard (Catalog #: 8006)


Intended Use: The Pyridinoline Internal Standard (INT-PYD) is designed for the determination of the recoveries of bone collagen crosslinks, pyridinoline (PYD) and deoxypyridinoline (DPD) in the pretreatment of the samples prior to analysis by HPLC. For Research Use Only.

Components: INT-PYD (frozen when not in use)

**Section 2 – Hazard Identification**
**2.1 Classification of the Substance of Mixture**

Kit Component	OSHA Hazards	Target Organs	GHS Classification
INT-PYD Standard (Acetic Acid, 90%)	Flammable Corrosive Irritant	Eye Skin	Flammable Liquids (Category 3) Skin Corrosion (Category 1A) Serious Eye Damage (Category 1)

**2.2 GHS Label Elements, including Precautionary Statements**

Component	Pictogram	Hazard Statements	Precautionary Statements
INT-PYD Standard (Acetic Acid, 90%)		H326 Flammable liquid and vapor. H303 May be harmful if swallowed. H314 Causes severe skin burns and eye damage.	P264 Wash hands thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves, eye protection / face protection, and body protection. P305+P351+P338: <b>IF IN EYES:</b> 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 attention. P301+P330+P331: <b>IF SWALLOWED:</b> Rinse mouth. DO NOT induce vomiting. P303+P361+P353: <b>IF ON SKIN:</b> Take off immediately all contaminated clothing. Rinse skin with water.
<b>Supplemental Hazard Statements</b>		None	

### Section 3 – Composition / Information on Ingredients

#### 3.1 Mixtures

Chemical Name	CAS #	EINECS #	Index #	Concentration (%)	Component Volume
Acetic Acid	64-19-7	200-580-7	607-002-00-6	90	5 mL

### Section 4 – First Aid Measures

#### 4.1 Description of First Aid Measures

- If inhaled:** Move the person to fresh air and support breathing as required.
- In case of skin contact:** Wash affected area with soap and water. Seek medical advice if irritation develops.
- In case of eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
- If swallowed:** Never give anything by mouth to an unconscious person. DO NOT induce vomiting. Rinse mouth with water. Seek medical advice if irritation develops.

#### 4.2 Most Important Symptoms and Effects (both acute and delayed)

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

No specific measures identified.

### Section 5 – Fire Fighting Measures

Only individuals properly trained and issued appropriate personal protective equipment should respond and attempt to extinguish a fire.

#### 5.1 Suitable Extinguishing Media

For small fires, use dry chemical, carbon dioxide or alcohol-resistant foam.

#### 5.2 Special Hazards Arising from the Substance or Mixture

Nature of decomposition products not known.

#### 5.3 General Fire Hazards

The components within this kit will not significantly contribute to the intensity of a fire. Use water spray to cool unopened containers.

#### 5.4 Fire Fighting Equipment

Firefighters should wear full protective gear when responding to fires.

### Section 6 – Accidental Release Measures

Only individuals properly trained and issued appropriate personal protective equipment should respond and attempt to clean up a spill or release. A large spill of any of the components listed in this SDS is unlikely.

#### 6.1 Personal Precautions

Use personal protective equipment, including protective gloves and safety glasses when cleaning up small spills of the INT-PYD Standard. Avoid breathing vapors, mist or gas. Keep all unnecessary personnel away from the spill area.

#### 6.2 Methods and Materials for Clean-Up

Wipe up with inert absorbent material (e.g., paper towel, etc.). Thoroughly wash the area with soap and water after a spill or release clean-up.

#### 6.3 Recovery and Neutralization

Collect spilled material and clean-up supplies and place in a sealed container for disposal. Refer to Section 13 for disposal guidance.

#### 6.4 Environmental Precautions

Contain spill to prevent migration to drains, sewers or open water sources. Discharge to the environment must be avoided.

### Section 7 – Handling and Storage

**7.1 Specific Use** For professional use only – Not for use by the general public.

**7.2 Precautions for Safe Handling**

As with all chemical and biological substances, avoid getting these components ON YOU or IN YOU. Wash exposed areas thoroughly after using these components. Do not eat or drink while using these components. These components should be handled only by qualified clinical or laboratory employees trained on the use of these antibodies and proteins and who are familiar with the potential hazards. Universal Precautions should be followed when handling and working with these components. Keep out of reach of the general public.

**7.3 Universal Precautions**

No known test method can offer complete assurance that product(s) derived from human blood, serum or plasma used in components of this kit will not transmit infectious agents. All blood products should be treated as potentially infectious; use universal precautions. Users should ensure the use of proper personal protective equipment (PPE), covering of any cuts or abrasions on the skin (hands), and follow standard protocols for the decontamination of work surfaces when testing has been completed. Always wash hands thoroughly after handling the components within this kit.

**7.4 Conditions for Safe Storage (including any incompatibilities)**

To maintain efficacy, store according to the Package Insert instructions. Keep away from sources of ignition.

**7.5 Incompatibilities**

To maintain efficacy, store according to the Package Insert instructions.

### Section 8 – Exposure Controls and Personal Protection

**8.1 Exposure Limits** No data available for the Bone Health Antibodies and Proteins.

**8.2 Exposure Controls**

Engineering Measures Use with adequate ventilation.

Personal Protective Equipment

*Respiratory Protection*

None needed under normal conditions of use.

*Skin Protection*

Handle with appropriately rated chemical resistant gloves. Gloves should be inspected prior to use. Use proper glove technique to remove gloves to avoid contact with skin. Wash hands after handling these components.

*Eye Protection*

Wear safety glasses with side shields or goggles to prevent eye contact.

*Body Protection*

Use body protection appropriate for the task. A laboratory coat is recommended.

*Hygiene Measures*

Wash hands before use, after use and at the end of the workday.

**8.3 Environmental Exposure Controls** No special environmental controls are required.

**8.4 Special Notes** No data available.

### Section 9 – Physical and Chemical Properties

Characteristic	INT-PYD Standard
Boiling Point (°C)	No data available
Melting Point (°C)	No data available
Specific Gravity (H <sub>2</sub> O = 1)	No data available
Vapor Pressure (mm Hg)	No data available
Vapor Density (Air = 1)	No data available
Evaporation Rate (Ether = 1)	No data available
pH	2.4
Solubility in Water	Soluble
Appearance and Odor	Liquid, clear with vinegar like odor

**Section 10 – Stability and Reactivity**

Characteristic	INT-PYD Standard
Component Stability	Stable
Hazard Reaction Potential	No data available
Conditions to Avoid	No data available
Materials to Avoid	Oxidizing agents, alcohols, nitric acid
Hazardous Decomposition Products	No data available

**Section 11 – Toxicological Properties**
**11.1 Information on Toxicological Effects**

## Acute Toxicity

Chemical Name	CAS #	RTECS #	Information
Acetic Acid	64-19-7	AF1225000	Inhalation LC50 Rat 11.4 mg/L 4h
			Oral LD50 Rat 3310 mg/kg
			Dermal LD50 Rabbit 1112 mg/kg

Skin Corrosion / Irritation Skin – rabbit – causes severe burns.

Serious Eye Damage / Eye Irritation Eyes – rabbit – corrosive to eyes.

Respiratory or Skin Sensitization May cause sensitization by skin contact.

Generative Cell Mutagenicity No data available

Carcinogenicity No component of this kit present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by the ACGIH, IARC, NTP or OSHA.

Reproductive Toxicity No data available

Teratogenicity No data available

## Specified Target Organ Toxicity

Single Exposure: No data available

Repeated Exposure: No data available

Aspiration Hazard No data available

## Potential Health Effects

*Inhalation:* May cause respiratory tract irritation.

*Skin:* May cause skin irritation upon contact.

*Ingestion:* May be harmful if swallowed.

*Eyes:* May cause eye irritation.

**11.2 Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated for the INT-PYD Standard.

**11.3 Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated for the INT-PYD Standard.

Stomach – Irregularities – Based on Human Evidence

**Section 12 – Ecological Information**

- 12.1 Toxicity** No data available for this standard.
- 12.2 Persistence and Degradability** No data available for this standard.
- 12.3 Bioaccumulative Potential** No data available for this standard.
- 12.4 Mobility in Soil** No data available for this standard.
- 12.5 PBT and vPvB Assessment** No data available for this standard.
- 12.6 Other Adverse Effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Avoid disposal to the environment.

**Section 13 – Disposal Considerations**

- 13.1 Waste Disposal Instructions**  
Utilize appropriate personal protective equipment and spill control when handling wastes generated from using this kit. Do not discharge any of the control stocks into drains, water courses or onto the ground.
- 13.2 Disposal of Product and Contaminated Packaging**  
Dispose of waste materials, unused components and contaminated packaging in compliance with country, federal, state and local regulations. If unsure of the applicable regulatory requirements, contact a licensed professional waste disposal service to dispose of this material.

**Section 14 – Transportation Information**

- 14.1 U.S Department of Transportation (DOT)** This component is not regulated for transport.
- 14.2 International Air Transportation Association (IATA)** This component is not regulated for transport.
- 14.3 International Maritime Dangerous Goods (IMDG)** This component is not regulated for transport.

**Section 15 – Regulatory Information**
**15.1 U.S. Federal Regulations**

- OSHA Hazards None
- SARA 302 The following chemicals are subject to reporting levels established by Sara Title III, Section 302:  
No chemicals in this kit are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313 The following chemicals are subject to reporting levels established by SARA Title III, Section 313:  
No chemicals in this kit are subject to the reporting requirements of SARA Title III, Section 313.
- SARA311/312 Hazards Acetic Acid CAS#: 64-19-7 Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**15.2 State Regulations**

The following chemicals appear on one or more of the following state hazardous substance lists:

Chemical Name	CAS #	CA	MA	MN	NJ	PA	RI
Acetic Acid	64-19-7	Yes	Yes	Yes	Yes	Yes	Yes

California Prop 65: This kit does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**15.3 Canadian – WHMIS Classification**

Chemical Name	CAS #	Classification
Acetic Acid	64-19-7	B3 Combustible Liquid E Corrosive Material

**Section 15 – Regulatory Information****15.4 Additional Regulatory Information**

**Safety, Health and Environmental Regulations/Legislation Specific for the Mixture** No data available

**Chemical Safety Assessment** Not completed for the components contained within this kit.

**HMIS Kit Classification:**

Health Hazard: 2  
Chronic Health Hazard: -  
Flammability: 0  
Physical Hazard: 0

**NFPA Kit Classification:**

Health Hazard (blue): 2  
Fire Hazard (red): 0  
Reactivity (yellow): 0  
Special Hazards (white): None

**Section 16 – Other Information**

**PREPARED BY:** Quidel Corporation  
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San Diego, CA 92130

**SUPERSEDES:** --

**REVISIONS:** New

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