Section 1 – Product and Company Identification

1.1 Manufacturer Information
Quidel Corporation
2005 East State Street, Suite 100
Athens, OH 45701
Phone: 1.800.874.1517
Fax: 1.740.592.9820
Emergency (24-Hour): 1.866.519.4752
Web: quidel.com
E-mail: gehs@quidel.com

1.2 Product Information
Product Name: Bone Health Antibodies and Proteins (Catalog #’s)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Catalog No.</th>
<th>Recommended Use</th>
<th>Quantity (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bovine H-Pyd</td>
<td>4805</td>
<td>Research Use Only</td>
<td>0.02</td>
</tr>
<tr>
<td>Bovine H-Dpd</td>
<td>4807</td>
<td>Research Use Only</td>
<td>0.02</td>
</tr>
<tr>
<td>Mouse Anti-Pyd Antibody</td>
<td>4809</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse Anti-Dpd</td>
<td>4811</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse Anti-YKL-40 Antibody</td>
<td>4813</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Rabbit Anti-YKL-40 Antibody</td>
<td>4815</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse Anti-CICP</td>
<td>4817</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse YKL-40 Purified Protein</td>
<td>A442</td>
<td>Research Use Only</td>
<td>0.025</td>
</tr>
<tr>
<td>Mouse Anti-PINP #1 (9D9C4)</td>
<td>4751</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse Anti-PINP #2 (9G5A1)</td>
<td>4752</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse Anti-PINP #3 (7H10C6)</td>
<td>4753</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
<tr>
<td>Mouse Anti-PINP #4 (12C2C8)</td>
<td>4754</td>
<td>Research Use Only</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Intended Use: These components are for Research Use Only. Not for use in diagnostic procedures.

Components: Various (see table above)

Section 2 – Hazard Identification

2.1 Classification of the Substance of Mixture
Not a hazardous substance or mixture.

2.2 GHS Label Elements, including Precautionary Statements
Not a hazardous substance or mixture.

2.3 Hazards Not Otherwise Classified (HNOC) or not covered by GHS
- Contains potentially infectious materials. Follow Universal Precautions when working with these components.

Section 3 – Composition / Information on Ingredients

3.1 Mixtures
Contains non-hazardous quantities of proprietary ingredients according to OSHA (29 CFR 1910.1200).
Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

3.2 No chemicals need to be disclosed according to the applicable regulations for the components in this kit.

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.
Bone Health Antibodies and Proteins

Section 4 – First Aid Measures (Cont’d)

If swallowed: Never give anything by mouth to an unconscious person. 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.

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 the components contained within this kit is unlikely.

6.1 Personal Precautions
Avoid breathing vapors, mist or gas.

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

6.3 Methods and Materials for Clean-Up
Soak 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.

6.4 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.

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 Conditions for Safe Storage (including any incompatibilities)
To maintain efficacy, store according to the package insert instructions.

7.4 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

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Antibodies and Proteins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point (°C)</td>
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</tr>
<tr>
<td>Melting Point (°C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate (Ether = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Clear liquid, Odorless</td>
</tr>
</tbody>
</table>

Section 10 – Stability and Reactivity

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Antibodies and Proteins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Hazard Reaction Potential</td>
<td>No data available</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>No data available</td>
</tr>
<tr>
<td>Materials to Avoid</td>
<td>No data available</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Section 11 – Toxicological Properties

11.1 Information on Toxicological Effects

Acute Toxicity: No data available
Skin Corrosion / Irritation: No data available
Respiratory or Skin Sensitization: No data available
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 components within this kit.

11.3 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated for the components within this kit.

Section 12 – Ecological Information

12.1 Toxicity: No data available
12.2 Persistence and Degradability: No data available
12.3 Bioaccumulative Potential: No data available
12.4 Mobility in Soil: No data available
12.5 PBT and vPvB Assessment: No data available
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) These components are not regulated for transport.

14.2 International Air Transportation Association (IATA) These components are not regulated for transport.

14.3 International Maritime Dangerous Goods (IMDG) These components are 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 No SARA hazards.

15.2 State Regulations

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
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<td>-</td>
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</tr>
</tbody>
</table>

California Prop 65: None of the components listed in this SDS contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

15.3 Canadian – WHMIS Ingredient Disclosure List

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
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</thead>
<tbody>
<tr>
<td>--</td>
<td>--</td>
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</tr>
</tbody>
</table>

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:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard:</td>
<td>1</td>
</tr>
<tr>
<td>Chronic Health Hazard:</td>
<td>*</td>
</tr>
<tr>
<td>Flammability:</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard:</td>
<td>0</td>
</tr>
</tbody>
</table>

NFPA Kit Classification:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard (blue):</td>
<td>1</td>
</tr>
<tr>
<td>Fire Hazard (red):</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity (yellow):</td>
<td>0</td>
</tr>
<tr>
<td>Special Hazards (white):</td>
<td>None</td>
</tr>
</tbody>
</table>

*Use additional care when handling the Bone Health Antibodies and Proteins.
Every effort has been made to adhere to the hazard criteria and content requirements of the U.S. OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labeling of Chemicals.

PREPARED BY: Quidel Corporation
12544 High Bluff Drive, Suite 200
San Diego, CA 92130

SUPERSEDES: September 13, 2013

REVISIONS: Change to 16-section format.

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