Section 1 – Product and Company Identification

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

1.2 Product Information
Product Name: Normal Human Serum Complement (Catalog #: A111, A112, A113)
Intended Use: Human Serum Complement is intended for use expressly in experiments to assess levels of in vitro complement activation or complement cytotoxicity. It has been characterized in the Quidel Complement Activation Assays for level of Bb, C4d, C3a, iC3b, and TCC as well as for total CH50.
Components:  1.0 – 5.0 mL vials (typically frozen)

Section 2 – Hazard Identification

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

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

2.3 Supplemental Hazard Statements
- Contains potentially infectious materials. Refer to Universal Precautions information in Section 7, Handling and Storage.
- Potentially infectious material

Section 3 – Composition / Information on Ingredients

3.1 Mixtures

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.
If swallowed:  Never give anything by mouth to an unconscious person. Rinse mouth with water (do not swallow). 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.
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 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 Bone Health antibodies or proteins. 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. 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 or Technical Data Sheet.

7.5 Incompatibilities
To maintain efficacy, store according to the Package Insert instructions or Technical Data Sheet.
Section 8 – Exposure Controls and Personal Protection

8.1 Exposure Limits
No data available for this component.

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>Normal Human Serum Complement</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>
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<tr>
<td>Appearance and Odor</td>
<td>Clear liquid, Odorless (frozen)</td>
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</tbody>
</table>

Section 10 – Stability and Reactivity

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Normal Human Serum Complement</th>
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</thead>
<tbody>
<tr>
<td>Component Stability</td>
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<tr>
<td>Hazard Reaction Potential</td>
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<tr>
<td>Conditions to Avoid</td>
<td>No data available</td>
</tr>
<tr>
<td>Materials to Avoid</td>
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<tr>
<td>Hazardous Decomposition Products</td>
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</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
Section 11 – Toxicological Properties (cont’d)

Carcinogenicity
No component, of the Normal Human Serum Complement, is 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 this component.

11.3 Additional Information
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated for this component.

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 component. Do not discharge this component 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.
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>
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<tr>
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</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 Classification

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Human Serum Complement</td>
<td>--</td>
<td>Potentially Infections Material</td>
</tr>
</tbody>
</table>

15.4 Additional Regulatory Information

Safety, Health and Environmental Regulations/Legislation Specific for the Mixture


Chemical Safety Assessment

Not completed for the components contained within this kit.

NFPA Kit Classification:

- Health Hazard (blue): 1
- Fire Hazard (red): 0
- Reactivity (yellow): 0
- Special Hazards (white): None

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Section 16 – Other Information

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

SUPERSEDES: July 9, 2013

REVISIONS: Updated from one-page SDS template to 16-Section SDS template.

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