# Monoclonal Antibodies – A200 Series

**`Reference No.**: N/A
**Catalog Numbers:** A200 – A255 **Revision Date**: February 7, 2008

## SECTION 1 – Reagent / Preparation and Company Identification

### 1.1 Monoclonal Antibodies – A200 Series *For Research Use Only*

| Catalog No. | Antibody | Catalog No. | Antibody |
|---|---|---|---|
| **A201** | Anti-Human C1q | **A229** | Anti-Human Factor H |
| **A203** | Anti-Human C3a | **A247** | Anti-Human Factor I (#1) |
| **A205** | Anti-Human C3(C3c) | **A231** | Anti-Human Factor I (#2) |
| **A207** | Anti-Human C3(C3d) | **A233** | Anti-Human Factor P (#1) |
| **A209** | Anti-Human iC3b (neo) | **A235** | Anti-Human Factor P (#2) |
| **A211** | Anti-Human C4(C4c) | **A237** | Anti-Human S Protein |
| **A213** | Anti-Human C4(C4d) | **A239** | Anti-Human SC5b-9 (neo) |
| **A215** | Anti-Human C4 BP | **A241** | Anti-Human Clusterin |
| **A217** | Anti-Human C5 | **A250** | Anti-Human C3d (neo) |
| **A219** | Anti-Human C6 | **A251** | Anti-Human C4d (neo) |
| **A221** | Anti-Human C7 | **A252** | Anti-Human Bb (neo) |
| **A249** | Anti-Human C8 | **A253** | Anti-Human C4(C4d) |
| **A223** | Anti-Human C9 | **A254** | Anti-Human Factor H #2 |
| **A225** | Anti-Human Factor B(Ba) | **A255** | Anti-Human Factor H #3 |
| **A227** | Anti-Human Factor B(Bb) | | |

**1.2 General Use:** Research reagent, Complement Specific Monoclonal Antibodies

**1.3 Manufacturer:** Quidel Corporation – 10165 McKellar Court – San Diego, CA 92121

**Telephone No.:** 1-858-552-1100 **Toll Free No.:** 1-800-874-1517 **Fax No.:** 1-858-453-4338

**1.4 Emergency No.:** Poison Control @ 1-800-876-4766 (USA only)

## SECTION 2 – Composition / Ingredients Information

**2.1 Description of Components:** 100 µL frozen vials

**2.2 Hazardous Ingredients:**

| | |
|---|---|
| ***Hazardous Chemicals:*** | *There are no hazardous chemicals contained within these components at concentrations greater than 1% or 0.1% for extremely hazardous chemicals.*<br><br>**Note:** Sodium Azide is used as a preservative at concentrations near 0.1% |
| ***Infectious Materials:*** | *Reagents contain 1.0 mg / mL of Murine Monoclonal Antibodies* |

## SECTION 3 – Hazard Identification

***Emergency Overview:*** As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical and biological components contained within this material and ensure prompt removal from skin, eyes, and clothing.

**3.1** No significant health effects are anticipated from routine use of the A200 Series Monoclonal Antibodies as long as *Universal Precautions* are practiced.

**3.2** The A200 Series Monoclonal Antibodies contain materials of human and/or animal origin and should be considered as potentially capable of transmitting infectious diseases.

**3.3** All patient samples, contaminated supplies, and fluids should be handled as potentially infectious.

**3.4** No warning properties have been identified for these components.

## SECTION 4 – First Aid Measures

**4.1** ***Inhalation*** Inhalation of these reagents is unlikely.

**4.2** ***Eye Contact*** When thawed, a slight risk for eye exposure may exist. If these reagents enter the eyes, immediately wash eyes under potable running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occurs, obtain medical attention.

**4.3** ***Skin Contact*** When thawed, a slight risk for skin exposure may exist. If these reagents contact the skin, remove any contaminated clothing and wash affected area with plenty of soap and water. If pain or irritation occurs, obtain medical attention.

**4.4** ***Ingestion*** If this reagent is ingested, wash mouth out with water. If irritation or discomfort occurs, obtain medical attention.

## SECTION 5 – Fire Fighting Measures

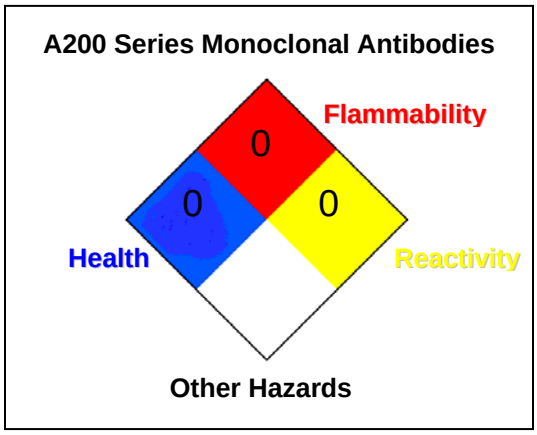
**5.1 Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, or alcohol-resistant foam.

**5.2 Special Fire Fighting Procedures:** These reagents will not significantly contribute to the intensity of a fire.

**5.3 Unusual Fire and Explosion Hazards:** None

**5.4 NFPA Ratings (see Section 16 for definitions of numerical ratings):**

**Only trained and competent personnel shall attempt to extinguish a fire.




## SECTION 6 – Accidental Release Measures

**6.1 Personal Precautions:** These reagents contain materials of biological origin. Avoid personal contact. Use Universal Precautions during clean-up procedures.

**6.2 Environmental Precautions:** No environmental hazard is anticipated.

**6.3 Spill and Leak Procedures:** Utilize safety glasses, nitrile gloves, and lab coat/apron when responding to spills involving any of the A200 antibody vials. Absorb liquid and place in container suitable for disposal. Dispose of in accordance with applicable U.S. Federal, State, or local procedures or appropriate standards of Canada or the EU.

## SECTION 7 – Handling and Storage

**7.1 Handling:** As with all chemicals and biological materials, avoid getting the components within these vials ON YOU or IN YOU. Wash exposed areas thoroughly after working with these vials. Do not eat or drink while handling these vials. These vials should be handled only by qualified clinical or laboratory employees trained on the safe use of chemical and biological agents and who are familiar with the potential hazards. These vials should be handled as though capable of transmitting infectious diseases. Universal Precautions should be followed when handling and working with these vials. ***Not for use by the general public.***

**7.2 Storage:** Keep away from incompatible materials (Section 10). To maintain efficacy, store according to the package insert instructions.

**7.3 Specific Use:** ***For Research Use Only. Not for use in diagnostic procedures.***

## SECTION 8 – Exposure Controls and Personal Protection

**8.1 Exposure Limits:** Not applicable

**8.2 Occupational Exposure Controls:**

**8.2.1 Engineering Controls:**

No special engineering controls are required when working with the A200 Series Monoclonal Antibodies. Use within adequately ventilated areas to minimize any potential for exposure.

**8.2.2 Personal Protective Equipment (PPE):**

Eye Contact: Safety glasses are recommended to prevent eye contact.

Hand Contact: Impervious gloves (nitrile or equivalent) should be worn to prevent hand contact.

Skin Contact: Lab Coat or similar garment is recommended to prevent contact with clothing and skin.

**8.2.3 Environmental Controls:** No special environmental controls are required.

## SECTION 9 – Physical and Chemical Properties

| Properties | A200 Series Monoclonal Antibodies |
|---|---|
| pH: | Neutral |
| Appearance and Odor: | Clear liquid when thawed, Odorless |

## SECTION 10 – Stability and Reactivity

**10.1** A200 Monoclonal Antibodies are stable. No reactive characteristics known.

**10.2** No incompatible materials have been identified.

## SECTION 11 – Toxicological Information

**11.1 Toxicity Data for Hazardous Ingredients:** There is currently no toxicity data available for the A200 Series Monoclonal Antibodies.

**11.2 Primary Routes of Exposure:**

***Overexposures to components within these reagents are not expected.*** Common routes of exposure may include ingestion and eye or skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and minimal potential for inhalation of aerosolized material.

**11.3 Potential Effects of Acute Overexposure, By Route Of Exposure:**

These reagents contain materials of animal origin and should be considered as potentially capable of transmitting infectious diseases – ***Use Universal Precautions when handling and working with these vials***.

INHALATION: Vapors, mists, or sprays from frozen or thawed materials are unlikely.

CONTACT WITH SKIN or EYES: Contact can cause slight eye or skin irritation.

SKIN ABSORPTION: May be irritating if absorbed through skin.

INGESTION: If swallowed, irritation of the mouth, throat, and other tissues of the gastro-intestinal system can occur.

INJECTION: Accidental injection can cause irritation and swelling in addition to the wound. Symptoms of such exposure can include those described under “Inhalation”, “Contact with Skin or Eyes,” and “Ingestion”.

**11.4 Potential Effects of Chronic Exposure:** Not known

**11.5 Symptoms of Overexposure:** Not known – overexposure unlikely when working with these vials.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated for the minimal concentrations of chemical and biological components within the A200 Series Monoclonal Antibodies.

**11.6 Medical Exposure Aggravated by Exposure:** Not known

**11.7 Carcinogenicity:** Not known

## SECTION 12 – Ecological Information

**12.1 Ecotoxicity** – Not known

**12.2 Mobility –** Not known

**12.3 Persistence and Degradability** – Not known

**12.4 Bioaccumulative Potential** - Not known

***No adverse effects on the environment are expected from the reagents contained within the A200 Series Monoclonal Antibodies. There is no aquatic toxicity data for the A200 Series Monoclonal Antibodies.*

## SECTION 13 – Disposal Considerations

Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

## SECTION 14 – Transport Information

**14.1 U.S. Transportation**

This product is ***NOT*** regulated per 49 CFR 172.101, the U.S. department of transportation.

**14.2 Canadian Transportation**

The above-listed DOT basic description applies to this product under the regulations of Transport Canada.

**14.3 International Air Transportation**

This product is ***NOT*** regulated per International Air Transportation Association (IATA) Dangerous Goods Regulations.

## SECTION 15 – Regulatory Information

**15.1 U.S. Federal and State Regulations**

| Regulatory Reference | A200 Series Monoclonal Antibodies |
|---|---|
| 40 CFR 355.30/355.40 - SECTION 302 | Not listed |
| 40 CFR 302.4 – SECTION 304 | Not listed |
| 40 CFR 372.65 – SECTION 313 | Not listed |

U.S. SARA SECTION 311/312 FOR KIT: Not applicable

U.S. TSCA INVENTORY STATUS: Not applicable

OTHER U.S. FEDERAL REGULATIONS: Not applicable

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Not listed

ENVIRONMENTAL HAZARDS: None known

**15.2 Label Information:** No specific labeling required

**15.3 Canadian Regulations:**

CANADIAN DSL/NDSL INVENTORY STATUS: These reagents are ***NOT*** listed on the DSL Inventory.

CANADIAN WHMIS SYMBOLS: Not applicable

**15.4 HMIS® Ratings** (See 'Definition of Terms' page for description of the listed ratings):

**A200 Series Monoclonal Antibodies**

| | |
|---|---|
| **Health** | **0** |
| **Flammability** | **0** |
| **Physical Hazard** | **0** |
| **Protective Equipment** | **B** |

**15.5 EU Labeling Classification:**

No danger symbols, risk phrases or safety phrases required for the A200 Series Monoclonal Antibodies.

## SECTION 16 – Other Information

This MSDS has been prepared in accordance with ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US 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.

The hazard ratings on this MSDS are for appropriately trained workers using the Hazardous Materials Identification System (HMIS®) or a National Fire Protection Association (NFPA) 704 Program. The ratings are estimates and should be treated as such. The hazard rating scales range from (0) minimal hazards to (4) significant hazards or risks (Refer to Definitions of Terms at the end of this MSDS). Chronic (long-term) health effects are indicated in the HMIS® by an asterisk (*). HMIS® is a registered trade and service mark of the NPCA. For details on HMIS® ratings visit www.paint.org/hmis. For details on NFPA 704 visit www.nfpa.org.

QUIDEL®

Material Safety Data Sheet

# Monoclonal Antibodies – A200 Series

**PREPARED BY:** Quidel Corporation
10165 McKellar Court
San Diego, CA 92121
1-800-874-1517

**REVISION:** 01

**DATE OF PRINTING** February 7, 2008

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QUIDEL®

Material Safety Data Sheet

# Monoclonal Antibodies – A200 Series

## DEFINITIONS OF TERMS

### A large number of abbreviations and acronyms appear on a MSDS. Some of these include the following:

**CAS #**: This is the Chemical Abstract Service Number that uniquely identifies each compound.

**ACGIH** - American Conference of Governmental Industrial Hygienists, a professional association that establishes exposure limits.

**TLV -** Threshold Limit Value - an airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers can be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average **(TWA)**, the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level **(C)**. Skin absorption effects must also be considered.
**OSHA** - U.S. Occupational Safety and Health Administration
**PEL -** Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL that was vacated by Court Order.
**IDLH -** Immediately Dangerous to Life and Health **-** This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG - MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. **O**ccupational **S**afety and **H**ealth **A**dministration (**OSHA**). NIOSH issues exposure guidelines called **R**ecommended **E**xposure **L**evels (**REL**s). When no exposure guidelines are established, an entry of **NE** is made for reference. **Protective Equipment – A**: Safety Glasses. **B**: Safety glasses and gloves. **C**: Safety glasses, gloves and body protection. **D**: Splash goggles with face shield, gloves and body protection. **E**: Eye protection, gloves and dust mask respiratory protection. **F**: Eye protection, gloves, body protection and dust mask respiratory protection. **G**: Eye protection, gloves and air purifying respiratory protection.

**HAZARD RATINGS:**
**HAZARDOUS MATERIALS IDENTIFICATION SYSTEM:** Health Hazard: **0** (minimal acute or chronic exposure hazard); **1** (slight acute or chronic exposure hazard); **2** (moderate acute or significant chronic exposure hazard); **3** (severe acute exposure hazard; onetime overexposure can cause permanent injury and can be fatal); **4** (extreme acute exposure hazard; single overexposure can be fatal). * Indicates chronic hazard. Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38° C [100°F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]. Reactivity Hazard: **0** (normally stable); **1** (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).
**NATIONAL FIRE PROTECTION ASSOCIATION:** Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure could cause death or major residual injury). Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

**FLAMMABILITY LIMITS IN AIR**: Much of the information related to fire and explosion is derived from the National Fire Protection Association (**NFPA**). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.
**TOXICOLOGICAL INFORMATION:**
Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **$LD_{50}$** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **$LC_{50}$** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **$mg/m^3$** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TDo**, **LDLo**, **LDo**, **TC**, **TCo**, **LCLo**, and **LCo**, the lowest dose (or concentration) to cause lethal or toxic effects. **BEI** - Biological Exposure Indices, represent the levels of determinants that are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. Ecological Information: **EC** is the effect concentration in water.

Data from several sources are used to evaluate the cancer-causing potential of the material. The sources and ratings are: **IARC** - the International Agency for Research on Cancer; 1 = Carcinogenic to humans, 2A, 2B = Probably carcinogenic to humans, 3 = Unclassifiable as to carcinogenicity in humans, and 4 = Probably not carcinogenic to humans. **NTP** - the National Toxicology Program; K =Known to be a human carcinogen, and R = Reasonably anticipated to be a human carcinogen. **RTECS** - the Registry of Toxic Effects of Chemical Substances. **OSHA -** Occupational Safety and Health Administration and **CAL/OSHA -** California's subunit of the Occupational Safety and Health Administration; Ca = Carcinogen defined with no further categorization. **ACGIH –** American Conference of Governmental Industrial Hygienists; A1 = Confirmed human carcinogen, A2 = Suspected human carcinogen, A3 = Confirmed animal carcinogen with unknown relevance to humans, A4 = Not classifiable as a human carcinogen, and A5 = Not suspected as a human carcinogen. **NIOSH** – U.S. National Institute for Occupational Safety and Health; Ca = Potential occupational carcinogen, with no further categorization. **EPA** – U.S. Environmental Protection Agency; A = Human carcinogen, B = Probable human carcinogen, C = Possible human carcinogen, D = Not classifiable as to human carcinogenicity, E = Evidence of Non-carcinogenicity for humans, K = Known human carcinogen, L = Likely to produce cancer in humans, CBD = Cannot be determined, NL = Not likely to be carcinogenic in humans, and I = Data are inadequate for an assessment of human carcinogenic potential.

**REGULATORY INFORMATION:**
This section explains the impact of various laws and regulations on the material. **EPA** is the U.S. Environmental Protection Agency. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively.

**Superfund Amendments and Reauthorization Act (SARA)**; the Canadian Domestic/Non-Domestic Substances List **(DSL/NDSL)**; the U.S. Toxic Substance Control Act **(TSCA)**; Marine Pollutant status according to the **DOT**; the Comprehensive Environmental Response, Compensation, and Liability Act **(CERCLA or Superfund)**; and various state regulations. This section also includes information on the precautionary warnings that appear on a material's industrial package label.