G-Biosciences/Genotech: St. Louis, MO, USA; www.GBiosciences.com email: technical@GBiosciences.com

Product: [Dimethyl sulfoxide $(CH_3)_2$ SO] DMSO, anhydrous **Catalog #**: BKC-17 [LU 5.11.09/MK]

Components	**Quantity**
[Dimethyl sulfoxide $(CH_3)_2$ SO] DMSO, anhydrous	50ml

Material Safety Data Sheet

Section 1: **Chemical Identification**

Name: [Dimethyl sulfoxide $(CH_3)_2$SO] DMSO, anhydrous

Catalog #: a component of product Cat # BKC-17 indicated above

Section 2: **Composition/Information on Ingredients**

[Dimethyl sulfoxide $(CH_3)_2$SO] DMSO **CAS# 67-68-5**

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

After swallowing: Wash out mouth with water provided person is conscious. Call a physician. Wash contaminated clothing before reuse.

Section 5: **Fire Fighting Measures**

Extinguishing Agents: Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedures: None Needed

Unusual fire and explosions hazards: None known

Section 6: **Accidental Release Measures**

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7: **Handling and Storage**

Refer to section 8.

Section 8: **Exposure Controls/Personal Protection**

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required. Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling. Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: **Physical and Chemical Properties**

Form: Liquid

Color: None

Odor: None

Section 10: **Stability and Reactivity**

Thermal Decomposition/Conditions to be avoided: No decomposition if used according to specifications. Avoid moisture.

Dangerous Reactions: Hazardous Exothermic Reactions: Methyl sulfoxide (DMSO) undergoes a violent exothermic reaction on mixing with copper wool and trichloroacetic acid. On mixing with potassium permanganate it will flash instantaneously. It reacts violently with: acid halides, cyanuric chloride, silicon tetrachloride, phosphorus trichloride and trioxide, thionyl chloride, magnesium perchlorate, silver fluoride, methyl bromide, iodine pentafluoride, nitrogen periodate, diborane, sodium hydride, and perchloric and periodic acids. When heated above its boiling point methyl sulfoxide degrades giving off formaldehyde, methyl mercaptan, and sulfur dioxide.

Dangerous Products of Decomposition: Carbon oxides, sulfur oxides.

Section 11: **Toxicological Information**

Primary Irritant Effects: Harmful if inhaled or ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Section 12: **Ecological Information**

Data not yet available.

Section 13: **Disposal Considerations**

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers. Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: **Regulatory information**

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: **Other Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. G-Biosciences shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

G-Biosciences/Genotech St. Louis, MO, USA

Web: www.GBiosciences.com, email: technical@GBiosciences.com