

## Material Safety Data Sheet

**Product Name:** TUD brand Vacuum Blood Collection Tube containing Gel and Clot Activator

### 1 Identification of substance:

□ **Product Name:** TUD brand Vacuum Blood Collection Tube containing Gel and Clot Activator

□ **Catalog Numbers:** 137520005,137530005,137535005,13754005,131045005,131050005,1310550005,131060005,  
1310650005,161070005,1610750005,161080005

□ **Manufacturer/Supplier:**

TUD Sdn Bhd

49-1, Jalan Temenggung 9/9, Bandar Mahkota Cheras, 43200 Cheras, Selangor, Malaysia.

□ **Information Department:**

TUD Sdn Bhd, Customer Service +03-9019 0331

### 2 Composition/Data on components:

□ **Description:**

**Chemical name:** Gel and Silica (Proprietary Mixture)

**Synonyms:** Silica: Amorphous silica, fused silica

□ **CAS No:**

Gel: Proprietary mixture

Silica: 60676-86-0

□ **Quantity of substances:**

Gel: 0.90 - 1.80 mg(TUD)

Silica: 0.25 - 2.0 mg(TUD)

□ **Exposure limits:** 0.1 mg/m<sup>3</sup> (ACGIH) (OSHA PEL)(Silica, respirable)

### 3 Hazards identification:

□ **Hazard description:**

**EU:** This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by European Directive 91/155/EEC, and 93/112/EC.

**U.S.:** Silica dust particles may cause slight eye irritation. Inhalation of large amounts of silica dust causes acute pneumoconiosis, characterized by coughing and throat irritation. Repeated inhalation of silica dust may cause silicosis, a delayed (chronic) lung disease characterized by a severe fibrous scarring of the lung. Silicosis may be progressive and result in heart failure. Silicosis increases the risk of tuberculosis, and may lead to chronic kidney disease and end-stage renal disease. Amorphous Silica is classified by IARC as Group 3 (Not classifiable as to human carcinogenicity.)  
Avoid inhalation of dusts.

Avoid generation and accumulation of dusts.

Primary route of entry: eyes, inhalation

□ **Classification system:** The classification is according to the latest editions of the EU- list, and extended by company and literature data.

□ **Acute Exposure Effects:**

Eyes: May cause slight eye irritation.

Skin: None identified.

Inhalation: May cause irritation of the respiratory tract.

Ingestion: None identified.

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**Repeated Exposure Effects:**

*Eyes:* May cause slight eye irritation.

*Skin:* None identified.

*Inhalation:* Repeated inhalation exposure to silica dust may cause silicosis, a delayed (chronic) lung disease characterized by a severe fibrous scarring of the lung. Silicosis may be progressive and result in heart failure. Silicosis increases the risk of tuberculosis, and may lead to chronic kidney disease and end-stage renal disease.

*Ingestion:* None identified.

**Medical Conditions Which Might be Aggravated:** Pre-existing lung disease

**NFPA ratings (scale 0-4):**

Health =2

Fire = 0

Reactivity = 0

Specific Hazard = 0

**HMIS ratings (scale 0-4):**

Health =2

Flammability = 0

Reactivity = 0

Special = 0

### **4 First aid measures:**

**General information:** No special measures required

**After inhalation:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

**After skin contact:** Immediately wash with water and soap, and rinse thoroughly

**After eye contact:** Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

**After Swallowing:** If large amounts are swallowed, get immediate medical attention.

**Information for doctor:** Show this label

### **5 Fire fighting measures:**

**Suitable extinguishing agents:** Use media suitable for surrounding fire.

**Protective equipment:** Wear self-contained NIOSH approved breathing apparatus and protective clothing to prevent contact with skin and eyes.

### **6 Accidental release measures:**

**Person-related safety precautions:** Avoid overexposure. Wear protective equipment, including NIOSH approved respirator. Exposure limits: 0.1 mg/m<sup>3</sup> (ACGIH)(OSHA PEL)(Silica, respirable)

**Measures for environmental protection:** Not applicable

**Measures for cleaning/collecting:** Wet down to minimize any airborne dust. Place in an appropriate disposal container.

**Additional information:** None

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### **7 Handling and storage:**

**Handling:**

**Information for safe handling:** Follow routine safe handling procedures.

**Information about protection against explosions and fires:** Not applicable.

**Storage:**

**Requirements to be met by storerooms and receptacles:** Use suitable containers. Keep tightly closed when not in use. Store in a well-ventilated area.

**Information about storage in one common storage facility:** Avoid strong oxidizing agents.

**Further information about storage conditions:** None

**Additional information about design of technical systems:** Use sufficient local or general exhaust.

**Components with limit values that require monitoring at the workplace:**

**Exposure limits:** 0.1 mg/m<sup>3</sup> (ACGIH) (OSHA PEL)(Silica)

**Additional information:** The lists that were valid during the creation were used as basis.

**Personal Protective Equipment:**

**General protective hygiene measures:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation. Provide eye bath and safety shower.

**Breathing equipment:** NIOSH/MSHA Approved respirator

**Protection of hands:** Use compatible chemical - resistant gloves

**Eye protection:** Use chemical safety goggles

**Body protection:** Wear appropriate protective clothing to prevent skin exposure.

### **09 Physical and chemical properties:**

**General Information:**

**Form:** Gel

**Color:** Clear

**Odor:** Odorless

**Change in condition:**

**Melting point/Melting range:** Not determined

**Boiling point/Boiling range:** Not determined

**Flash point:** 547°C (1016°F)

**Flammability (solid, gaseous):** Not applicable

**Danger of explosion:** Product does not present an explosion hazard.

**Vapor pressure:** Not applicable

**Density:** 1.04 – 1.05 g/cm<sup>3</sup>

**Solubility in/Miscibility w/H<sub>2</sub>O:** Insoluble

**pH-value:** Not applicable

**Organic solvents:** 0.0%

**Solids content:** 2.6 – 2.9%

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### **10 Stability and reactivity:**

- Thermal decomposition / conditions to be avoided:** None identified
- Materials to be avoided:** Strong oxidizing agents
- Dangerous reactions:** Stable
- Dangerous products of decomposition:** None identified

### **11 Toxicological information:**

- Acute toxicity:**

*Eye:* May cause slight eye irritation.

*Skin:* None identified.

*Inhalation:* May cause irritation of the respiratory tract.

*Ingestion:* None identified.

- Primary irritant effect:**

*On the skin:* Not established

*On the eye:* Not established

- Sensitization:** Not established

- Additional toxicological information:**

**Chronic:** Exposure to silica dust may cause silicosis, a delayed (chronic) lung disease characterized by a severe fibrous scarring of the lung. Silicosis may be progressive and result in heart failure. Silicosis increases the risk of tuberculosis, and may lead to chronic kidney disease and end-stage renal disease.

**Carcinogenicity:** Amorphous Silica is classified by IARC as Group 3 (Not classifiable as to human carcinogenicity.)

### **12 Ecological information:**

- Ecotoxicological effects:** No data is available on the adverse effects of this material on the environment.

Neither COD nor BOD data are available.

- Other information:** Not applicable

- General notes:** Not applicable

### **13 Disposal considerations:**

- Product:**

#### **Recommendation**

Disposal should be done in accordance with local, state and federal regulations.

Disposal must be made according to the regulations found in 40 CFR 261.

This product is not a RCRA hazardous waste.

- Uncleaned packagings:**

#### **Recommendation**

Disposal should be done in accordance with local, state and federal regulations.

#### **Recommended cleansing agent**

Water, if necessary with cleansing agents

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### 14 Transport information:

- DOT regulations:** Not regulated
- Land transport ADR/RID (cross-border):** Not regulated
- Maritime transport IMDG:** Not regulated
- Air transport ICAO-TI and IATA-DGR:** Not regulated

### 15 Regulations:

- SARA Section 355 (extremely hazardous substances):** Substance not listed
- SARA Section 302 (extremely hazardous substances):** Substance not listed
- SARA Section 304 (Reportable Quantity (RQ) under CERCLA):** None
- Section 313 (specific toxic chemical listings):** Substance not listed
- TSCA (Toxic Substances Control Act) Inventory:** Silica listed
- SARA Section 311/312 (Hazard notification categories under SARA Title III):** Acute; Chronic
- Hazardous chemical(s) under OSHA Hazard Communication Standard (29 CFR 1910.1200):** Respirable Amorphous, fused silica listed.
- Carcinogenicity categories**

**IARC (International Agency for Research on Cancer):** Group 3 (Not classifiable as to human carcinogenicity)

**NTP (National Toxicology Program):** Amorphous silica not listed

**TLV (Threshold Limit Value established by ACGIH):** 0.1 mg/m<sup>3</sup> (Silica, respirable)

**MAK (German Maximum Workplace Concentration):** MAK: 0,3 A mg/m<sup>3</sup> (Silica)

- Product related hazard information:**
- National regulations:** Not applicable
- Water hazard class:** Not known to be hazardous to water.

### 16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, TUD does not assume any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

 **Department issuing MSDS:** Regulatory Affairs