1. Identification of the substance/preparation and of the company/undertaking

<table>
<thead>
<tr>
<th>Product name</th>
<th>Dansyl Chloride</th>
<th>Catalog #</th>
<th>311155</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical formula</td>
<td>C_{12}H_{12}ClNO_2S</td>
<td>Supplier</td>
<td>Manufactured by EMD Biosciences, Inc.</td>
</tr>
<tr>
<td>Synonym</td>
<td>5-(Dimethylamino)-napthalene-1-sulfonyl Chloride</td>
<td></td>
<td>10394 Pacific Center Court San Diego, CA 92121 (858)450-5558/(800)854-3417 FAX: (858)453-3552</td>
</tr>
</tbody>
</table>

2. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Substance/Preparation</th>
<th>CAS No.</th>
<th>EC Number</th>
<th>Symbol</th>
<th>R-Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 5-(Dimethylamino)-napthalene-1-sulfonyl Chloride</td>
<td>605-65-2</td>
<td>210-092-6</td>
<td>C</td>
<td>R34</td>
</tr>
</tbody>
</table>

3. Hazards identification

Physical/chemical hazards: Not applicable.

Human health hazards: DANGER! CAUSES SEVERE RESPIRATORY TRACT, EYE AND SKIN BURNS.
MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: LUNGS, GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, HEAD.

4. First-aid measures

**First-Aid measures**

**Inhalation**: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion**: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin Contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Eye Contact**: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**Effects and symptoms**

**Inhalation**: Extremely hazardous in case of inhalation (lung corrosive). Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Over-exposure by inhalation may cause respiratory irritation.

**Ingestion**: May be fatal if swallowed. May cause burns to mouth, throat, and stomach.

**Skin Contact**: Extremely hazardous in case of skin contact (corrosive). The amount of tissue damage depends on length of contact. Skin contact can produce inflammation and blistering. Skin contact may produce burns.

**Eye Contact**: Extremely hazardous in case of eye contact (corrosive). Eye contact can result in corneal damage or blindness.

**Aggravating conditions**: Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.
5. **Fire-fighting measures**

**Flammability of the Product**
- May be combustible at high temperature.

**Extinguishing Media**
- Suitable: SMALL FIRE: Use DRY chemical powder.
  - LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Hazardous thermal (de)composition products**
- These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...), sulfur oxides (SO₂, SO₃...), halogenated compounds.

**Special fire-fighting procedures**
- Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

**Protection of fire-fighters**
- Be sure to use an approved/certified respirator or equivalent.

6. **Accidental release measures**

**Personal precautions**
- Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Small Spill and Leak**
- Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill and Leak**
- Corrosive solid.
  - Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

7. **Handling and storage**

**Handling**
- Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Never add water to this product. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alcalis.

**Storage**
- Package under dry conditions. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 4°C (39.2°F).

**Recommended use**
- Use original container.

8. **Exposure controls/personal protection**

**Engineering measures**
- Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Hygiene measures**
- Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Dansyl Chloride</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Personal protective equipment**

**Respiratory system**
- Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Skin and body**
- Synthetic apron.

**Hands**
- Gloves.

**Eyes**
- Splash goggles.

**Protective Clothing**
- [Pictograms]

9. **Physical and chemical properties**

**Physical state**
- Solid.

**Color**
- Yellow to red. (Light.)

**Molecular Weight**
- 269.8 g/mole

**Melting Point**
- 72.05 to 74.05°C (161.7 to 165.3°F)

**Solubility**
- Not available.

**Flash point**
- Not available.

**Explosive properties**
- Risks of explosion of the product in presence of mechanical impact: Not available.
  - Risks of explosion of the product in presence of static discharge: Not available.
10. Stability and reactivity

Stability
- The product is stable.

Conditions to avoid
- Hygroscopic; keep container tightly closed.

Materials to avoid
- Reactive with oxidizing agents, alkalis.

Hazardous Decomposition Products
- These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...), sulfur oxides (SO2, SO3...), halogenated compounds.

11. Toxicological information

RTECS #
- QK3688000

Local effects
- Skin irritation: Extremely hazardous in case of skin contact (corrosive).
- Acute toxicity:
  - LD50: Not available.
  - LC50: Not available.

Chronic toxicity
- Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

Other Toxic Effects on Humans
- Not available.

Specific effects
- Carcinogenic effects: Classified None. by NIOSH.
- Mutagenic effects: Not available.
- Reproduction toxicity: Not available.
- Teratogenic effects: Not available.

12. Ecological information

Ecotoxicity
- Not available.

Toxicity of the Products of Biodegradation
- The products of degradation are more toxic than the product itself.

13. Disposal considerations

Methods of disposal; Waste of residues; Contaminated packaging
- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

International transport regulations

UN number
- UN3261

Land - Road/Railway
- Proper shipping name: Corrosive solid, acidic, organic, n.o.s.*
- ADR/RID Class: CLASS 8: Corrosive solid.
- Packing Group: II
- ADR/RID label:

Sea
- Proper shipping name: Corrosive solid, acidic, organic, n.o.s.*
- IMDG Class: CLASS 8: Corrosive solid.
- Packing Group: II
### 15. Regulatory information

**EU Regulations**
- **Hazard symbol(s):**
- **Classification:** Corrosive
- **Risk Phrases:** R34 - Causes burns.
- **Safety Phrases:** S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
  S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**U.S. Federal Regulations**
- **Contains:** TSCA 8(b) inventory: Dansyl Chloride
- **SARA 302/304/311/312 extremely hazardous substances:** No products were found.
- **SARA 302/304 emergency planning and notification:** No products were found.
- **SARA 302/304/311/312 hazardous chemicals:** No products were found.
- **SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** No products were found.
- **SARA 313 toxic chemical notification and release reporting:** No products were found.
- **Clean Water Act (CWA) 307:** No products were found.
- **Clean Water Act (CWA) 311:** No products were found.
- **Clean air act (CAA) 112 accidental release prevention:** No products were found.
- **Clean air act (CAA) 112 regulated flammable substances:** No products were found.
- **Clean air act (CAA) 112 regulated toxic substances:** No products were found.

**HCS Classification**
- **CLASS:** Target organ effects.
- **CLASS:** Corrosive material

**State Regulations**
- **WHMIS (Canada)**
  - **CLASS D-2A:** Material causing other toxic effects (VERY TOXIC).
  - **CLASS E:** Corrosive solid.
  - **CEPA DSL:** Dansyl Chloride

### 16. Other information

**Hazardous Material Information System (U.S.A.)**

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 3</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**National Fire Protection Association (U.S.A.)**
- **Health:** 3
- **Fire Hazard:** 1
- **Reactivity:** 0
- **Specific Hazard:**

**Notice to Reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability 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.