

## Safety Data Sheet

### Section 1: Product & Company Identification

|                         |  |
|-------------------------|--|
| <b>Product Name:</b>    | DAPI   |
| <b>Product #:</b>       | D-3000   |
| <b>Synonyms:</b>        | DAPI dihydrochloride<br>4',6-Diamidino-2-phenylindole, 2HCl  |
| <b>Supplier:</b>        | AG Scientific Holdings, LLC<br>9950 Scripps Lake Drive, Suite 104<br>San Diego, CA 92131<br>Tele# + 858-452-9925 |
| <b>Emergency Tele#:</b> | ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585   |

### Section 2: Composition / Information on Ingredients

| Component | CAS #      | EC #      | % Composition |
|-----------|------------|-----------|---------------|
| DAPI      | 28718-90-3 | 249-186-7 |               |

### Section 3: Hazards Identification

|                |   |
|----------------|---|
| <b>Symbols</b> |  |
|----------------|---|

#### HMIS Rating

| Health Hazard | Chronic Health Hazard | Flammability | Physical Hazard |
|---------------|-----------------------|--------------|-----------------|
|               |                       |              |                 |

#### NFPA Rating

| Health Hazard | Fire Hazard | Reactivity Hazard |
|---------------|-------------|-------------------|
|               |             |                   |

### Section 4: First Aid Measures

|                          |   |
|--------------------------|---|
| <b>General Overview:</b> | Show this material safety data sheet to the doctor in attendance. |
| <b>Inhalation:</b>       | After inhalation: fresh air.                                      |

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|-------------------|--|
| <b>Skin:</b>      | In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician. |
| <b>Eyes:</b>      | After eye contact: rinse out with plenty of water. Remove contact lenses.  |
| <b>Ingestion:</b> | After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.                            |
|                   | See section 11 for more detailed information on health effects & symptoms.   |

## SECTION 5: Fire Fighting Measures

|  |  |
|--|--|
| <b>Flammability of the product:</b>                | Combustible  |
| <b>Extinguishing Media:</b>                        | Water, Foam, Carbon dioxide (CO <sub>2</sub> ), Dry powder   |
| <b>Hazardous thermal (de)composition products:</b> | Hydrogen chloride gas, nitrogen oxides, nitrous gases.   |
| <b>Special Fire Fighting Procedures:</b>           | Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. |
| <b>Flash Point:</b>                                | No data available  |





## Section 6: Accidental Release Measures

|                                   |   |
|-----------------------------------|---|
| <b>Personal Precautions:</b>      | Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.<br>For personal protection see section 8. |
| <b>Environmental Precautions:</b> | Do not let product enter drains.  |
| <b>Methods for Clean-up:</b>      | Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.                                    |

## SECTION 7: Handling & Storage

|                  |   |
|------------------|---|
| <b>Storage:</b>  | Tightly closed. Dry. Recommended storage temperature: -20°C<br>Storage class (TRGS 510): 11: Combustible Solids |
| <b>Handling:</b> | For precautions see section 2.2.  |

## SECTION 8: Exposure controls / Personal Protection

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|--|--|
| <b>Respiratory Protection:</b>           |  <p>Recommended Filter type: Filter type P2</p> <p>The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Required when dusts are generated.</p> <p>Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.</p> |
| <b>Skin and Body:</b>                    |   <p>Protective gloves and lab coat.</p>  |
| <b>Eyes:</b>                             |  <p>Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses</p>  |
| <b>Ventilation/Engineering Measures:</b> | <p>Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. Do not let product enter drains.</p>  |
| <b>Hygiene:</b>                          | <p>Follow standard good industrial hygiene practices.</p>  |
| <b>Other:</b>                            | <p>Contains no substances with occupational exposure limit values.</p>   |

## SECTION 9: Physical and Chemical Properties

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Appearance &amp; Odor:</b> | Solid. Yellow.                 |
| <b>Formula</b>                | $C_{16}H_{15}N_5 \cdot 2HCl$   |
| <b>Molecular Wt.</b>          | 350.3                          |
| <b>Melting Pt.</b>            | No data available              |
| <b>Boiling Pt.</b>            | No data available              |
| <b>Density:</b>               | No data available              |
| <b>Vapor Pressure:</b>        | No data available              |
| <b>Evaporation Rate:</b>      | No data available              |
| <b>Vapor Density:</b>         | No data available              |
| <b>Solubility:</b>            | Water, Methanol, Ethanol, DMSO |
| <b>Flash Point:</b>           | No data available              |
| <b>Autoignition Temp:</b>     | No data available              |

## SECTION 10: Stability and Reactivity

|  |  |
|--|--|
| <b>Stability:</b>                        | The product is chemically stable under standard ambient conditions (room temperature). |
| <b>Hazardous decomposition products:</b> | In the event of fire, see section 5.   |
| <b>Materials to Avoid:</b>               | Strong oxidizing agents  |
| <b>Conditions to avoid:</b>              | No data available  |

## SECTION 11: Toxicological Information

|  |   |
|--|---|
| <b>RTECS#:</b>   | N/A   |
| <b>ACUTE Toxicity:</b>   | Specific target organ toxicity - single exposure<br>May cause respiratory irritation.   |
| <b>CHRONIC Toxicity:</b>   | N/A   |
| <b>Chronic Exposure:</b><br><b>Carcinogen:</b><br><b>Mutagen:</b><br><b>Teratogen:</b><br><b>Reproductive:</b> | IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.<br>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by AGGIH.<br>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.<br>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA. |

|  |   |
|--|---|
|  | EPA: No classification on carcinogenic data is available from EPA |
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## SECTION 12: Ecological Information

|                                       |                   |
|---------------------------------------|-------------------|
| <b>Ecotoxicity:</b>                   | No data available |
| <b>Mobility:</b>                      | No data available |
| <b>Persistence and degradability:</b> | No data available |
| <b>Bioaccumulative potential:</b>     | No data available |
| <b>Other adverse effects:</b>         | No data available |
| <b>Corrosivity Characteristic:</b>    | No data available |
| <b>General Notes:</b>                 | No data available |

## SECTION 13: Disposal Considerations

|   |   |
|---|---|
| <b>Residue Waste or Unused product:</b> | Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. |
| <b>Contaminated Packaging:</b>          | Handle uncleaned containers like the product itself.  |

## SECTION 14: Transportation Information

|                            |               |
|----------------------------|---------------|
| <b>UN ID#:</b>             | N/A           |
| <b>ADR / RID (LAND):</b>   | Not regulated |
| <b>DOT regulations:</b>    | Not regulated |
| <b>IMDG/IMO (SEA):</b>     | Not regulated |
| <b>IATA/DGR (AIR):</b>     | Not regulated |
| <b>Special Provisions:</b> | N/A           |

## SECTION 15: Regulatory Information

|                        |  |
|------------------------|--|
| <b>Health Phrases:</b> | Warning!<br>H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H335 May cause respiratory irritation.  |
| <b>Risk Phrases:</b>   | P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.<br>P264 Wash skin thoroughly after handling.<br>P271 Use only outdoors or in a well-ventilated area.<br>P272 Contaminated work clothing must not be allowed out of the workplace.<br>P280 Wear protective gloves. |
| <b>Safety Phrases:</b> | P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  |

|                                  |  |
|----------------------------------|--|
|                                  | <p>P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362 Take off contaminated clothing and wash before reuse.</p> <p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container to an approved waste disposal plant.</p>  |
| <b>EU Regulations:</b>           | N/A  |
| <b>US Regulations:</b>           | <p>TSCA: Not listed</p> <p>California Proposition 65: No products were found</p>   |
| <b>U.S. Federal Regulations:</b> | <p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found.</p> <p>SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>Clean Water Act (CWA) 307: No products were found.</p> <p>Clean Water Act (CWA) 311: No products were found.</p> <p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: Skin irritation (Cat. 2); Skin sensitization (Sub-cat. 1A); Specific target organ toxicity – single exposure – respiratory system (Cat. 3)</p> |
| <b>WHMIS (Canada):</b>           | N/A  |

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*