

# MATERIAL SAFETY DATA SHEET

| SECTION 1--PRODUCT IDENTIFICATION AND USE  |  |   |   |  |
|--|--|---|---|--|
| PRODUCT IDENTIFIER<br><b>CALCOFLUOR WHITE STAIN</b>  |  |   | CATALOGUE NUMBER:<br><b>SC15</b>                              |  |
| MANUFACTURER'S NAME<br>Dalynn Biologicals Inc.   |  | SUPPLIER'S NAME<br>Dalynn Biologicals Inc.  |   |  |
| STREET ADDRESS<br>3253 34 Avenue N.E.  |  | STREET ADDRESS<br>3253 34 Avenue N.E.   |   |  |
| CITY<br>Calgary  | PROVINCE<br>Alberta                                      | CITY<br>Calgary   | PROVINCE<br>Alberta   |  |
| POSTAL CODE<br>T1Y 6X2   | <b>CHEMICAL EMERGENCY ONLY:</b><br><b>1-613-996-6666</b> | POSTAL CODE<br>T1Y 6X2  | <b>CHEMICAL EMERGENCY ONLY:</b><br><b>1-613-996-6666</b>      |  |
| SECTION 2--HAZARDOUS INGREDIENTS   |  |   |   |  |
| HAZARDOUS INGREDIENTS  | %  | CAS NUMBER  | LD <sub>50</sub> OF INGREDIENT<br>(SPECIFY SPECIES AND ROUTE) | LC <sub>50</sub> OF INGREDIENT<br>(SPECIFY INGREDIENT) |
| <b>Calcofluor White M2R</b>  | <b>0.1</b>   | <b>4193-55-9</b>  | <b>Oral – Rat 14 530 mg/kg</b>                                | <b>Not available</b>                                   |
| <b>Evans Blue</b>  | <b>0.05</b>  | <b>314-13-6</b>   | <b>lpr – Mus 340 mg/kg</b>                                    | <b>Not available</b>                                   |
| <b>Water</b>   | <b>99</b>  | <b>7732-18-5</b>  | <b>Not available</b>  | <b>Not available</b>                                   |
| SECTION 3—PHYSICAL DATA  |  |   |   |  |
| PHYSICAL STATE<br><b>Liquid</b>  | ODOUR AND APPEARANCE<br><b>Odorless, blue liquid</b>     |   |   | ODOUR THRESHOLD (ppm)<br><b>Not available</b>          |
| VAPOUR PRESSURE (mmHg)<br><b>Not available</b>   | VAPOUR DENSITY (AIR=1)<br><b>Not available</b>           | EVAPORATION RATE<br><b>Not available</b>  | BOILING POINT (°C)<br><b>Not available</b>                    | FREEZING POINT (°C)<br><b>Not available</b>            |
| pH<br><b>Not available</b>   | SPECIFIC GRAVITY<br><b>Not available</b>                 | COEFF. WATER/OIL DIST.<br><b>Not available</b>  |   |  |
| SECTION 4--FIRE AND EXPLOSION DATA   |  |   |   |  |
| FLAMMABLE<br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, UNDER WHICH CONDITIONS? >   |  |   |   |  |
| MEANS OF EXTINCTION<br><b>Water spray, CO<sub>2</sub>, dry chemical powder or appropriate foam</b>   |  |   |   |  |
| FLASHPOINT (°C) AND METHOD<br><b>Not available</b>   |  | UPPER FLAMMABLE LIMIT (% BY VOLUME)<br><b>Not available</b>   | LOWER FLAMMABLE LIMIT (% BY VOLUME)<br><b>Not available</b>   |  |
| AUTOIGNITION TEMPERATURE (°C)<br><b>Not available</b>  |  | HAZARDOUS COMBUSTION PRODUCTS<br><b>Toxic fumes of carbon monoxide, carbon dioxide, and nitrogen oxides</b> |   |  |
| EXPLOSION DATA ><br><b>Not available</b>   |  | SENSITIVITY TO STATIC DISCHARGE<br><b>Not available</b>   |   |  |
| SECTION 5--REACTIVITY DATA   |  |   |   |  |
| CHEMICAL STABILITY<br>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, UNDER WHICH CONDITIONS? >                                       |  |   |   |  |
| INCOMPATIBILITY WITH OTHER SUBSTANCES<br>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF SO, WHICH ONES? > <b>Strong oxidizing agents</b> |  |   |   |  |
| REACTIVITY, AND UNDER WHAT CONDITIONS<br><b>Not available</b>  |  |   |   |  |
| HAZARDOUS DECOMPOSITION PRODUCTS<br><b>Carbon monoxide, carbon dioxide, nitrogen oxides</b>  |  |   |   |  |

|  |                       |                          |                      |
|--|-----------------------|--------------------------|----------------------|
| PRODUCT <b>CALCOFLUOR WHITE STAIN</b>  |                       |                          |                      |
| IDENTIFIER >   |                       |                          |                      |
| <b>SECTION 6--TOXICOLOGICAL PROPERTIES</b>   |                       |                          |                      |
| ROUTE OF ENTRY   |                       |                          |                      |
| SKIN CONTACT [X]   | SKIN ABSORPTION [X]   | EYE CONTACT [X]          | INGESTION [X]        |
| EFFECTS OF ACUTE EXPOSURE TO PRODUCT   |                       |                          |                      |
| <p><b>May cause irritation to eyes on contact. Symptoms include redness, itching and pain. Rinse eyes immediately. Inhalation may cause irritation to mucous membranes and upper respiratory tract.</b></p> <p><b>May be harmful if swallowed, inhaled or absorbed through skin. The main component in this product is water therefore no serious side effects are expected.</b></p>   |                       |                          |                      |
| EFFECTS OF CHRONIC EXPOSURE TO PRODUCT   |                       |                          |                      |
| <p><b>Evans blue is a possible carcinogen and may be harmful to the unborn child. The small percentage of Evans blue minimizes the danger associated with the chemical although direct and prolonged contact is not recommended. The chronic toxicological effects of exposure to this product have not been thoroughly investigated.</b></p>  |                       |                          |                      |
| EXPOSURE LIMITS  | IRRITANCY OF PRODUCT  | SENSITISATION TO PRODUCT | CARCINOGENICITY      |
| <b>Not available</b>   | <b>Possible</b>       | <b>Not available</b>     | <b>Possible</b>      |
| TERATOGENICITY   | REPRODUCTIVE TOXICITY | MUTAGENICITY             | SYNERGISTIC PRODUCTS |
| <b>Not available</b>   | <b>Not available</b>  | <b>Possible</b>          | <b>Not available</b> |
| <b>SECTION 7--PREVENTIVE MEASURES</b>  |                       |                          |                      |
| PERSONAL PROTECTIVE EQUIPMENT:   |                       |                          |                      |
| <b>Wear appropriate protective clothing! Safety glasses, chemical resistant gloves, and a laboratory coat.</b>   |                       |                          |                      |
| ENGINEERING CONTROLS (SPECIFY, EG, VENTILATION, ENCLOSED PROCESS)  |                       |                          |                      |
| <b>Local exhaust or chemical fume hood.</b>  |                       |                          |                      |
| LEAK AND SPILL PROCEDURE   |                       |                          |                      |
| <b>Take up with an absorbent and containerize appropriately. After pick-up of material wash spill site and ventilate area.</b>   |                       |                          |                      |
| WASTE DISPOSAL   |                       |                          |                      |
| <b>According to local, provincial and federal regulations</b>  |                       |                          |                      |
| HANDLING PROCEDURES AND EQUIPMENT  |                       |                          |                      |
| <b>Avoid direct contact. Wash thoroughly after handling.</b>   |                       |                          |                      |
| STORAGE REQUIREMENTS   |                       |                          |                      |
| <b>Store at room temperature and avoid exposure to light.</b>  |                       |                          |                      |
| SPECIAL SHIPPING INFORMATION   |                       |                          |                      |
| <b>Double pack in isolated container.</b>  |                       |                          |                      |
| <b>SECTION 8--FIRST AID MEASURES</b>   |                       |                          |                      |
| <p><b>In case of contact with eyes, rinse immediately with copious amounts of water for at least 15 minutes.</b></p> <p><b>In case of contact with skin, wash with soap and plenty of water. Remove contaminated clothing and wash before reuse.</b></p> <p><b>If swallowed, wash mouth out with water providing person is conscious and seek medical attention.</b></p> <p><b>If inhaled remove patient to fresh air and administer approved oxygen supply if breathing is difficult.</b></p> <p><b>Seek medical attention.</b></p> |                       |                          |                      |
| <b>SECTION 9--PREPARATION OF MSDS</b>  |                       |                          |                      |
| PREPARED BY (GROUP, DEPT, ETC.)  | PHONE NUMBER          | DATE                     |                      |
| Technical Department<br>Dalynn Biologicals Inc.  | (403) 291-0067        | 2014 March               |                      |