

# MATERIAL SAFETY DATA SHEET

SECTION 1—PRODUCT IDENTIFICATION AND USE				
PRODUCT IDENTIFIER ➤ <b>AURAMINE-RHODAMINE (MODIFIED) STAIN</b>			CATALOGUE NUMBER: <b>SA92</b>	
MANUFACTURER'S NAME <b>Dalynn Biologicals Inc.</b>		SUPPLIER'S NAME <b>Dalynn Biologicals Inc.</b>		
STREET ADDRESS <b>3253 – 34 Avenue NE</b>		STREET ADDRESS <b>3253 – 34 Avenue NE</b>		
CITY <b>Calgary</b>	PROVINCE <b>Alberta</b>	CITY <b>Calgary</b>	PROVINCE <b>Alberta</b>	
POSTAL CODE <b>T1Y 6X2</b>	<b>CHEMICAL EMERGENCY ONLY:</b> <b>1-613-996-6666</b>	POSTAL CODE <b>T1Y 6X2</b>	<b>CHEMICAL EMERGENCY ONLY:</b> <b>1-613-996-6666</b>	
SECTION 2—HAZARDOUS INGREDIENTS				
HAZARDOUS INGREDIENTS	%	CAS NUMBER	LD <sub>50</sub> OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC <sub>50</sub> OF INGREDIENT (SPECIFY INGREDIENT)
<b>Auramine O</b>	<b>0.28</b>	<b>2465-27-2</b>	<b>Oral – Mus 480 mg/kg</b>	<b>Not Available</b>
<b>Rhodamine B</b>	<b>0.14</b>	<b>81-88-9</b>	<b>Oral – Mus 887mg/kg</b>	<b>Not Available</b>
<b>Phenol</b>	<b>17.0</b>	<b>108-95-2</b>	<b>Oral – Mus 270 mg/kg</b>	<b>Inh – Mam 74 mg/m3</b>
<b>Ethanol</b>	<b>23.5</b>	<b>64-17-5</b>	<b>Oral – Rat 7,060 mg/kg</b>	<b>Inh – Rat 31,623 ppm/4h</b>
<b>Glycerol</b>	<b>19.0</b>	<b>56-81-5</b>	<b>Oral – Rat 12,600 mg/kg</b>	<b>Not Available</b>
SECTION 3—PHYSICAL DATA				
PHYSICAL STATE <b>Liquid</b>	ODOUR AND APPEARANCE <b>Orange-red liquid with aromatic odor</b>			ODOUR THRESHOLD (ppm) <b>Not available</b>
VAPOUR PRESSURE (mmHg) <b>Not available</b>	VAPOUR DENSITY (AIR=1) <b>Not available</b>	EVAPORATION RATE <b>Not available</b>	BOILING POINT (°C) <b>Not available</b>	FREEZING POINT (°C) <b>Not available</b>
pH <b>Not available</b>	SPECIFIC GRAVITY <b>Not available</b>	COEFF. WATER/OIL DIST. <b>Not available</b>		
SECTION 4—FIRE AND EXPLOSION DATA				
FLAMMABLE YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF YES, UNDER WHICH CONDITIONS? ➤ <b>Possibility of ignition if exposed to sparks or an open flame</b>				
MEANS OF EXTINCTION <b>Water spray, carbon dioxide, dry chemical powder, or appropriate foam</b>				
FLASHPOINT (°C) AND METHOD <b>Not available</b>	UPPER FLAMMABLE LIMIT (% BY VOLUME) <b>Not available</b>		LOWER FLAMMABLE LIMIT (% BY VOLUME) <b>Not available</b>	
AUTOIGNITION TEMPERATURE (°C) <b>Not available</b>	HAZARDOUS COMBUSTION PRODUCTS <b>Carbon dioxide, carbon monoxide, acrolein, nitrogen gas, hydrogen chloride gas</b>			
EXPLOSION DATA ➤	SENSITIVITY TO IMPACT <b>Not available</b>		SENSITIVITY TO STATIC DISCHARGE <b>Not available</b>	
SECTION 5—REACTIVITY DATA				
CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, UNDER WHICH CONDITIONS? ➤				
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF SO, WHICH ONES? ➤ <b>Strong oxidizing agents, strong reducing agents, and strong acids</b>				
REACTIVITY, AND UNDER WHAT CONDITIONS <b>Not available</b>				
HAZARDOUS DECOMPOSITION PRODUCTS <b>Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides</b>				

PRODUCT IDENTIFIER <b>AURAMINE-RHODAMINE (MODIFIED) STAIN</b> >			
<b>SECTION 8--TOXICOLOGICAL PROPERTIES</b>			
ROUTE OF ENTRY SKIN CONTACT <input checked="" type="checkbox"/> SKIN ABSORPTION <input checked="" type="checkbox"/> EYE CONTACT <input checked="" type="checkbox"/> INHALATION <input checked="" type="checkbox"/> INGESTION <input checked="" type="checkbox"/>			
EFFECTS OF ACUTE EXPOSURE TO PRODUCT <b>Causes irritation on contact with skin, or eyes. May result in permanent damage to eyes including blindness.</b> <b>The presence of phenol makes the product extremely destructive to mucous membranes and inhalation may cause death as a result of spasm, inflammation and edema. Symptoms may include a burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache and nausea.</b> <b>Ingestion may result in circulatory collapse, paralysis, convulsions, coma, jaundice, and death. The ethanol contained in this product is not suitable for human consumption; ingestion of this product may result in blindness or death.</b>			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT <b>Some components of this product have shown carcinogenic, mutagenic effects and fetotoxicity.</b> <b>To the best of our knowledge the chronic toxicological effects of this product have not been thoroughly investigated.</b>			
EXPOSURE LIMITS <b>Not available</b>	IRRITANCY OF PRODUCT <b>Yes</b>	SENSITISATION TO PRODUCT <b>Not available</b>	CARCINOGENICITY <b>Possible</b>
TERATOGENICITY <b>Possible</b>	REPRODUCTIVE TOXICITY <b>Not available</b>	MUTAGENICITY <b>Possible</b>	SYNERGISTIC PRODUCTS <b>Not available</b>
<b>SECTION 7--PREVENTIVE MEASURES</b>			
PERSONAL PROTECTIVE EQUIPMENT: <b>Wear appropriate protective clothing! Safety glasses, chemical resistant gloves, and 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 for proper storage. After pick-up of material is complete wash spill site and ventilate area.</b>			
WASTE DISPOSAL <b>Mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Follow local, provincial and federal regulations</b>			
HANDLING PROCEDURES AND EQUIPMENT <b>Avoid direct or prolonged contact.</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>			
<b>In case of contact with eyes or skin, immediately flush eyes or skin with copious amounts of water for at least 15 minutes.</b> <b>If inhaled, remove patient to fresh air and administer an approved oxygen supply if breathing is difficult.</b> <b>If ingested, do not induce vomiting and give a large quantity of water provided patient is conscious. Seek medical attention.</b>			
<b>SECTION 9--PREPARATION OF MSDS</b>			
PREPARED BY (GROUP, DEPT, ETC.) Technical Department Dalynn Biologicals Inc.	PHONE NUMBER (403) 291-0067	DATE 2014 April	