

# MATERIAL SAFETY DATA SHEET

SECTION 1—PRODUCT IDENTIFICATION AND USE				
PRODUCT IDENTIFIER > <b>ALPHA NAPHTHOL REAGENT</b>			CATALOGUE NUMBER: <b>RA45</b>	
MANUFACTURER'S NAME Dalynn Biologicals Inc.		SUPPLIER'S NAME Dalynn Biologicals Inc.		
STREET ADDRESS 3253 – 34 Avenue N.E.		STREET ADDRESS 3253 – 34 Avenue N.E.		
CITY Calgary	PROVINCE Alberta	CITY Calgary	PROVINCE Alberta	
POSTAL CODE T1Y 6X2	<b>CHEMICAL EMERGENCY ONLY:</b> <b>1-613-996-6666</b>	POSTAL CODE T1Y 6X2	<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>α-Naphthol</b>	<b>100</b>	<b>90-15-3</b>	<b>Oral – Mouse 275 mg/kg</b>	<b>Inh – Rat 420 mg/m3</b>
SECTION 3—PHYSICAL DATA				
PHYSICAL STATE <b>Solid</b>	ODOUR AND APPEARANCE <b>Tan powder with aromatic scent</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>278 - 280</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>Exposure to intense heat or direct flame</b>				
MEANS OF EXTINCTION <b>Water spray, carbon dioxide, dry chemical powder or appropriate foam</b>				
FLASHPOINT (°C) AND METHOD <b>125 (cc)</b>		UPPER FLAMMABLE LIMIT (% BY VOLUME) <b>5</b>	LOWER FLAMMABLE LIMIT (% BY VOLUME) <b>0.8</b>	
AUTOIGNITION TEMPERATURE (°C) <b>542</b>		HAZARDOUS COMBUSTION PRODUCTS <b>Carbon monoxide, carbon dioxide</b>		
EXPLOSION DATA > SENSITIVITY TO IMPACT <b>No</b>			SENSITIVITY TO STATIC DISCHARGE <b>No</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 bases</b>				
REACTIVITY, AND UNDER WHAT CONDITIONS <b>Not available</b>				
HAZARDOUS DECOMPOSITION PRODUCTS <b>Carbon monoxide, carbon dioxide</b>				

PRODUCT IDENTIFIER >		<b>ALPHA NAPHTHOL REAGENT</b>	
<b>SECTION 6—TOXICOLOGICAL PROPERTIES</b>			
ROUTE OF ENTRY			
SKIN CONTACT	[X]	SKIN ABSORPTION	[X]
EYE CONTACT	[X]	INHALATION	[X]
INGESTION	[X]		
EFFECTS OF ACUTE EXPOSURE TO PRODUCT			
<p><b>May cause skin and eye irritation on contact.</b></p> <p><b>May be irritating to mucous membranes and upper respiratory tract if inhaled.</b></p> <p><b>Harmful if Ingested. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Target organs include eyes, kidney and liver.</b></p>			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT			
<p><b>The chronic toxicological effects of this product have not been thoroughly investigated. This product has shown negative effects on fertility in some animal models.</b></p>			
EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITISATION TO PRODUCT	CARCINOGENICITY
Not available	Yes	Not available	Not available
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
Not available	Not available	Not available	Not available
<b>SECTION 7—PREVENTIVE MEASURES</b>			
PERSONAL PROTECTIVE EQUIPMENT:			
<p><b>Wear appropriate protective clothing: Gloves, safety goggles, lab coat or appropriate clothing.</b></p>			
ENGINEERING CONTROLS (SPECIFY, EG, VENTILATION, ENCLOSED PROCESS)			
<p><b>Use in area with adequate ventilation.</b></p>			
LEAK AND SPILL PROCEDURE			
<p><b>Wearing safety goggles; gloves and dust mask, sweep up, place in bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.</b></p>			
WASTE DISPOSAL			
<p><b>According to local, provincial and federal regulations</b></p>			
HANDLING PROCEDURES AND EQUIPMENT			
<p><b>Avoid direct contact. Wash thoroughly after handling.</b></p>			
STORAGE REQUIREMENTS			
<p><b>Keep at room temperature.</b></p>			
SPECIAL SHIPPING INFORMATION			
<p><b>Proper shipping name: Toxic solid, organic, NOS; UN 2811; Class 6.1; Packing Group III</b></p>			
<b>SECTION 8—FIRST AID MEASURES</b>			
<p><b>In case of contact with eyes, rinse with copious amounts of water for at least 15 minutes.</b></p> <p><b>In case of contact with skin, wash with copious amounts of water.</b></p> <p><b>If swallowed, wash mouth out with water provided person is conscious.</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 Dalynn Biologicals Inc.	(403) 291-0067	2014 January	