

# MATERIAL SAFETY DATA SHEET

SECTION 1--PRODUCT IDENTIFICATION AND USE				
PRODUCT IDENTIFIER > <b>BUFFERED FORMALIN</b>			CATALOGUE NUMBER: <b>BF65</b>	
MANUFACTURER'S NAME <b>Dalynn Biologicals Inc.</b>		SUPPLIER'S NAME <b>Dalynn Biologicals Inc.</b>		
STREET ADDRESS <b>3253 - 34 Ave N.E.</b>		STREET ADDRESS <b>3253 - 34 Ave N.E.</b>		
CITY <b>Calgary</b>	PROVINCE <b>Alberta</b>	CITY <b>Calgary</b>	PROVINCE <b>Alberta</b>	
POSTAL CODE <b>T1Y 6X2</b>	CHEMICAL EMERGENCY ONLY: <b>1-613-996-6666</b>	POSTAL CODE <b>T1Y 6X2</b>	CHEMICAL EMERGENCY ONLY: <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>Formaldehyde</b>	<b>10.0</b>	<b>50-00-0</b>	<b>Oral-Mus 42 mg/kg</b>	<b>Inh-Rat 590 mg/kg</b>
<b>Methanol</b>	<b>1.5</b>	<b>64-19-7</b>	<b>Oral-Rat 3310 mg/kg</b>	<b>Inh-Rat 16000 ppm/4h</b>
<b>Water</b>	<b>~90</b>	<b>7732-18-5</b>	<b>None</b>	<b>None</b>
SECTION 3--PHYSICAL DATA				
PHYSICAL STATE <b>Liquid</b>	ODOUR AND APPEARANCE <b>Pungent odor; colourless liquid</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>4.5</b>	SPECIFIC GRAVITY <b>Not available</b>	COEFF. WATER/OIL DIST. <b>Not available</b>		
SECTION 4--FIRE AND EXPLOSION DATA				
FLAMMABLE YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, UNDER WHICH CONDITIONS? > <b>Product contains mostly water</b>				
MEANS OF EXTINCTION <b>Dry chemical, carbon dioxide, or water spray</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</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>Oxidizers, isocyanates, phenol, anhydrides, hydrochloric acid, perchloric acid, nitromethane, aniline, peroxyformic acid</b>				
REACTIVITY, AND UNDER WHAT CONDITIONS <b>Not available</b>				
HAZARDOUS DECOMPOSITION PRODUCTS <b>Carbon monoxide, carbon dioxide, formic acid</b>				

PRODUCT		<b>BUFFERED FORMALIN</b>	
IDENTIFIER >			
<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>Skin: May cause irritation on contact.</b></p> <p><b>Eye: May cause irritation with redness and pain. May cause permanent damage to the eye.</b></p> <p><b>Inhalation: May be toxic if inhaled in quantity. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes respiratory tract irritation.</b></p> <p><b>Ingestion: May be toxic if ingested in quantity. Product contains mostly water but the presence of formaldehyde and methanol still makes this solution poisonous.</b></p>			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT			
<p><b>Respiratory damage upon prolonged exposure to formaldehyde. Formaldehyde is a potential carcinogen. Given the low concentration of formaldehyde in this product the danger associated with contact is minimized, but prolonged and direct contact is not recommended.</b></p>			
EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITISATION TO PRODUCT	CARCINOGENICITY
Not available	Yes	Possible	Possible
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; rubber gloves, safety glasses, and lab coat or other appropriate clothing that covers arms and other open body parts.</b></p>			
ENGINEERING CONTROLS (SPECIFY, EG, VENTILATION, ENCLOSED PROCESS)			
<p><b>Use in area with adequate ventilation or in chemical fume hood.</b></p>			
LEAK AND SPILL PROCEDURE			
<p><b>Take up with an absorbent and containerize appropriately.</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>Store at room temperature</b></p>			
SPECIAL SHIPPING INFORMATION			
<p><b>None</b></p>			
<b>SECTION 8--FIRST AID MEASURES</b>			
<p><b>In case of contact with eyes, rinse immediately with copious amounts of water for a minimum of 15 minutes.</b></p> <p><b>In case of contact with skin, wash with soap and plenty of water.</b></p> <p><b>If swallowed, wash mouth out with water. Do not induce vomiting. Dilute, inactivate or absorb the ingredients by giving milk or water.</b></p> <p><b>Never give anything by mouth to an unconscious person.</b></p> <p><b>In all the above instances seek medical attention after.</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 October	