## **MATERIAL SAFETY DATA SHEET**

		SECT	TION 1PRODUCT ID	ENTIFICATION A	ND USE			
PRODUCT   IDENTIFIER > Campylobacter Supplement (CFP)					CATALOGUE NUMBER:			
MANUFACTURER'S NAME		SUPPLIER'S NAME						
Dalynn Biologicals Inc.		Dalynn Biologicals Inc.						
STREET ADDRESS		STREET ADDRESS						
3253 - 34 Avenue N.E.		3253 - 34 Avenue N.E.						
CITY	PROVINCE			CITY		VINCE		
Calgary	Alberta			Calgary Albert			erta	
POSTAL CODE	CHEMICAL EMERGE						MICAL EMERGENCY ONLY:	
T1Y 6X2	1-613-996-6666			T1Y 6X2 <b>1-613</b>			13-996-6666	
		9	SECTION 2—HAZARE	OOUS INGREDIEN	NTS			
HAZARDOUS INGRED	IENTS	%	CAS NUMBER	CAS NUMBER LD50 OF INGREDIEN (SPECIFY SPECIES AND		JTE)	LC₅0 OF INGREDIENT (SPECIFY INGREDIENT)	
Cefoperazone (16 mg/vial)		100	62893-20-3	Oral – Rat 12	2 g/kg	Not	applicable	
		<u> </u>	SECTION 3—PH	IYSICAL DATA		<u> </u>		
PHYSICAL STATE	ODOUR AND APPEAR	RANCE	NCE			ODOUR THRESHOLD (ppm)		
Solid	Odorless, whit	e crystalline	e powder				Not available	
VAPOUR PRESSURE (mmHg)	VAPOUR DENSITY (A	IR=1)	EVAPORATION RATE	BOILING POINT (°F)		°F)	FREEZING POINT (°F)	
Not available	Not available		Not available	ble Not available		Not available		
PH	SPECIFIC GRAVITY		COEFF. WATER/OIL DIST.					
Not available	Not available		Not available					
		S	ECTION 4—FIRE AN	D EXPLOSION DA	ATA			
FLAMMABLE								
	UNDER > CONDITIONS?	Upon expos	sure to open flam	ne				
MEANS OF EXTINCTION								
Carbon dioxide, dry chemic	al powder, alco	hol foam. o	r water sprav.					
FLASHPOINT (°C) AND METHOD	•		BLE LIMIT (% BY VOLUME	Ξ)		LOWER FLAMMAB	BLE LIMIT (% BY VOLUME)	
Not available		Not availab		•		Not available		
AUTOIGNITON TEMPERATURE (°C) HAZARDOUS COMBUSTION PRODUCTS								
Not available		Carbon mo	noxide, carbon d	ioxide, nitroge	en oxides, sı	ılfur oxides		
EXPLOSION SENSITIVITY TO IMPACT SENSI					SENSITIVITY TO STATIC DISCHARGE			
DATA ►								
No			SECTION 5—REA					
CHEMICAL STABILITY			SECTION 5—REA	ACTIVITY DATA				
YES [X] NO [] IF N	IO, UNDER	>						
INCOMPATIBILITY WITH OTHER SUBSTA								
YES [X] NO []	IF SO,	Oxidizinç	g agents					
REACTIVITY, AND UNDER WHAT CONDIT								
No								
HAZARDOUS DECOMPOSITION PRODUC	CTS							
Carbon monoxide, carbon o	dioxide, nitroge	n oxides, su	lfur oxides					

PRODUCT IDENTIFIER ➤	Campylobac	ter Sup	plement (CFP)							
SECTION 6—TOXICOLOGICAL PROPERTIES										
ROUTE OF ENTRY										
	SKIN CONTACT	[X]	SKIN ABSORPTION	[X]	EYE CONTACT	[X]	INHALATION	[X]	INGESTION	[X]

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Cefoperazone is an irritant and may cause eye and skin irritation on contact. Symptoms include redness and swelling. Cefoperazone ingestion and inhalation will give clinical signs and hepatitis-like symptoms, interference with hemostasis via hypoprothrombinemia with or without bleeding, molecular attachment that prevents activation of prothrombin, platelet dysfunction. Associated coagulopathies include: hypoprothrombinemia, platelet abnormalities, immune-mediated thrombocytopenia. Headache. Hypotension. Skin rash, itching, diarrhea, eosinophilia, vomiting, possible alterations in liver and kidney function, decreased hemoglobin level. Exposure can cause allergic reactions: Because of the similarity in structure of the penicillins and cephalosporins, those who are allergic to one class of agents may manifest cross-allergenicity when a member of the other class is encountered.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

The chronic toxicological effects of exposure to this product have not been thoroughly investigated.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITISATION TO PRODUCT	CARCINOGENICITY	
Not available	Yes	Yes	Not available	
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS	
Not available Not available		Not available	Not available	

## SECTION 7—PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

Wear appropriate protective clothing: Chemical resistant gloves, safety goggles, lab coat or other appropriate clothing that covers arms and other open body parts.

ENGINEERING CONTROLS (SPECIFY, EG, VENTILATION, ENCLOSED PROCESS)

Use in area with adequate ventilation.

LEAK AND SPILL PROCEDURE

Wearing appropriate safety gear including chemical resistant gloves and dust mask or respirator should be used. Sweep up, place in bag and hold for disposal. Ventilate area and wash spill site after material pickup is complete.

WASTE DISPOSAL

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. According to local, provincial and federal regulations.

HANDLING PROCEDURES AND EQUIPMENT

Avoid direct and prolonged contact. Wash thoroughly after handling.

STORAGE REQUIREMENTS

Keep at refrigerated temperatures.

SPECIAL SHIPPING INFORMATION

This product is considered non-hazardous for transport.

## SECTION 8--FIRST AID MEASURES

In case of contact with eyes, rinse with copious amounts of water for at least 15 minutes.

In case of contact with skin, wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing. If swallowed, wash mouth out repeatedly with water provided person is conscious.

If inhaled remove patient to fresh air and administer approved oxygen supply if breathing is difficult.

If feeling unwell seek medical attention

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SECTION 9PREPARATION OF MSDS					
	PREPARED BY (GROUP, DEPT, ETC.)	PHONE NUMBER	DATE		
	Technical Department Dalvnn Biologicals Inc.	(403) 291-0067	2014 October		