SAFETY DATA SHEET



1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME:	Pluronic® F-68
PRODUCT NUMBER:	P770
COMPANY INFO:	<i>Phyto</i> Technology Laboratories® PO Box 12205, Shawnee, KS 66282-2205 Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442 www.phytotechlab.com
EMERGENCY PHONE NUM	IBER: 1-800-535-5053 - US Only 1-352-323-3500 - International
RECOMMENDED USE:	For Research Use Only
RESTRICTIONS ON USE:	Products sold by <i>Phyto</i> Technology Laboratories® are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture.

GHS Label elements, including hazard and precautionary statements:

Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS - None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Poloxamer 188, Polyoxyethylene-polyoxypropylene block copolymer

CAS No.: 9003-11-6

Formula: (C3H6O.C2H4O)x

Molecular Weight: 8400 Avg. g/mol

Ingredient	CAS Number	Percent	Hazardous
Pluronic® F-68	9003-11-6	>98 %	No exposure limits established by OSHA or ACGIH

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
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Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.
Special Protective Equipment and Precaution for Firefighters:	In the event of a fire, wear full protective clothing and NIOSH approved self- contained breathing apparatus. Evacuate the area and fight fire from a safe distance.
Hazardous Combustion Products:	May emit toxic fumes under fire conditions.
Toxic Gases Produced:	Carbon dioxide and carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Method of Containment and Cleanup:	Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let products enter drains.

7. HANDLING AND STORAGE

Precaution for Safe Handling:	Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use.	
Conditions for Safe Storage:	Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.	
Incompatibilities:	Strong oxidizing agent	
Recommended Storage Temperature:	Room Temperature	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits	(PELs): No data available	
Threshold Limit Values (TLVs):	No data available	
Engineering Controls:	Handle in accordance to general industrial hygiene and safety practice.	
Personal Protective Equipment (PPE):		
Eye/Face Protection:	Chemical safety glasses or goggles. Have eye-washing facilities readily available whe eye contact can occur.	
Skin Protection:	Protective gloves	
Body Protection:	Lab coat	
Respiratory Protection:	Respiratory protection is not required. Use N95 (US) or type P1 (EN 143) dust mask where dust level is nuisance. A NIOSH/MSHA approved air purifying respirator is recommended where airborne concentrations are expected to exceed exposure limits. Protection provided by purifying respirators is limited.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to	off-white powder		
pH:	No data	No data available		
Solubility:	Soluble i	Soluble in Water		
Melting Point:	No data	available		
Vapor Density:	No data	available		
Vapor Pressure:	No data	available		
Odor:	May hav	May have characteristic odor		
Odor Threshold:	No data	available		
Viscosity:	No data	No data available		
Relative Density:	No data	No data available		
Evaporation Rate:		No data available		
Initial Boiling Point a Boiling Range:	and	No data available		
Flammability (solid,	gas):	No data available		
Partition coefficient: n-octanol/water):	No data available			
Auto-ignition Tempe	erature: No data available			
Decomposition Temp	berature: No data available			
Flash Point (Closed C	Cup):	No data available		
Flammable Limits:		Upper (%) – No data available	Lower (%) – No data available	

10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions of use
Possibility of Hazard Reactions:	Will not occur
Conditions to Avoid:	Incompatibles
Incompatibles Materials:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon dioxide, carbon monoxide

11. TOXICOLOGICAL INFORMATION

Toxicity:	LD ₅₀ (Oral-Rat)(mg/Kg): LD ₅₀ (Dermal-Rabbit)(mg/Kg): LD ₅₀ (Oral-Mouse)(mg/Kg):		9,380	
			g/Kg):	20,000
			(g):	15,000
Carcinogenicity:	NTP:	No		
	IARC:	No		
	Z List:	No		
	OSHA Reg:	No		
Reproductive Toxicity:	No data availab	le		
Symptoms Associated with Overexposure:	Irritation, itchin	g, gastroii	ntestinal u	pset, nausea, headache
Specific Target Organ Toxicity:	Single Exposure	e:	No data a	available
	Repeated Expos	sure:	No data a	available

Target Organs:	None identified
Medical Conditions Aggravated By Exposure:	None identified
Routes of Entry:	Inhalation, Ingestion
NIOSH/RTECS NO:	MD0911600

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity:	No data available
Persistence and Degradability:	No data available
Bioaccumulative Potential:	No data available
Mobility in Soil:	No data available
Other Adverse Effects:	No data available

13. DISPOSAL CONSIDERATION

Disposal Procedure:	Dispose in accordance with all applicable federal, state, and local environmental
	regulations.
EPA Hazardous Waste Number:	No data available

14. TRANSPORT INFORMATION

Domestic (D.O.T.):	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)		
	Hazard Class:	N/A		
	UN/NA:	N/A		
	Labels:	N/A		
International:				
IMDG:	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)		
	Hazard Class:	N/A		
	UN/NA:	N/A		
	Labels:	N/A		
IATA:	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)		
	Hazard Class:	N/A		
	UN/NA:	N/A		
	Labels:	N/A		
15. REGULATORY INFORMATION				
TSCA:		Yes		
SARA TITLE III:				
Section 302 (EHS) Ingredients:		No		
Section 313 Ingredients:		No		
Section 304 (EHS/CERCLA) Ingredients:		No		
Section 311/312 Hazard:		No SARA Hazards		
Massachusetts Right to Know Components:		No components are subject to the Massachusetts Right to Know Act.		

Pennsylvania Right to Know Components: New Jersey Right to Know Components: California Prop. 65 Components: CAS No.: 9003-11-6 Polyethylene glycol, propoxylated

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This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating:	Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
	1		0	0
NFPA Rating:	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
	1	0	0	

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