SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME:	Schenk & Hildebrandt Modified Basal Medium, Contains 10 g/L Sucrose, 1/2x Vitamins, 1/2x Micro- and 1/2x Macronutrients
PRODUCT NUMBER:	S808
COMPANY INFO:	PhytoTech Labs Inc. 14610 W 106th St. Lenexa, KS 66215 Phone: 1-888-749-8682 or 1-913-341-5343 www.phytotechlab.com
EMERGENCY PHONE NUMBER (INFOTRAC):	1-800-535-5053 - US Only 1-352-323-3500 - International
RECOMMENDED USE:	For Laboratory-use or Further Manufacture only
RESTRICTIONS ON USE:	Products sold by PhytoTech Labs Inc. 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, in vitro diagnostics, or as household chemicals.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

H315 - Skin irritation (Category 2)
H319 - Eye irritation (Category 2A)

GHS Label elements, including hazard and precautionary statements:

Pictogram: 

Signal Word: Warning

Hazard Statements:

H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H335 – May cause respiratory irritation.

Precautionary Statements:

P280 – Wear protective clothing/protective gloves/eye protection.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture that contains, but is not limited to, the following components that may cause harm to the user or environment or may be suspected to do so:

Ingredient	CAS Number	Percent	Hazardous
Potassium Nitrate	7757-79-1	10.33 %	No exposure limits established by OSHA or ACGIH
EDTA, Disodium Salt, Dihydrate	6381-92-6	0.083 %	No exposure limits established by OSHA or ACGIH
Cobalt Chloride, Hexahydrate	7791-13-1	0.0004 %	ACGIH TLV: 0.02 mg (Co)/m^3
Cupric Sulfate, Pentahydrate	7758-99-8	0.0008 %	NIOSH REL: 1 mg/m^3
Sodium Molybdate (VI), Dihydrate	10102-40-6	0.0004 %	OSHA PEL: 5 mg (Mo)/m^3; ACGIH TLV: 5 mg (Mo)/m^3
Manganese Sulfate, Monohydrate	10034-96-5	0.041 %	OSHA PEL: 5 mg (Mn)/m^3
Potassium Iodide	7681-11-0	0.004 %	ACGIH TLV: 0.01 mg/m^3
Boric Acid	10043-35-3	0.021 %	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.**
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. **Get medical attention if irritation persists.**

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 oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas, Potassium oxides, Sodium oxides, Cobalt/cobalt oxides, Molybdenum oxides, Copper oxides

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. Keep away from combustible materials. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Protect from moisture. Product is hygroscopic.

Incompatibilities: Strong oxidizing agent

Recommended Storage Temperature: 2-8^{o}C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs):	Manganese Sulfate, Monohydrate : 5 mg (Mn)/m^3 Sodium Molybdate(VI), Dihydrate: 5 mg (Mo)/m^3
ACGIH Threshold Limit Values (TLVs):	Cobalt Chloride, Hexahydrate: 0.02 mg (Co)/m^3 Sodium Molybdate(VI), Dihydrate: 5 mg (Mo)/m^3 Potassium Iodide: 0.01 mg/m^3 Manganese Sulfate, Monohydrate: 0.2 mg (Mn)/m^3
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 where 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 (12.10 g/L):	4.0 – 5.0
Solubility:	Soluble in Water
Melting Range:	No data available
Vapor Density:	No data available
Vapor Pressure:	No data available
Specific Gravity:	No data available
Odor:	Odorless
Odor Threshold:	No data available
Viscosity:	No data available
Relative Density:	No data available
Evaporation Rate:	No data available
Initial Boiling Point and Boiling Range:	No data available
Flammability (solid, gas):	No data available
Partition coefficient: n-octanol/water):	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Flash Point (Closed 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:	Moisture, excessive heat

Incompatibles Materials:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas, Potassium oxides, Sodium oxides, Cobalt/cobalt oxides, Molybdenum oxides, Copper oxides

11. TOXICOLOGICAL INFORMATION

Toxicity:	LD_{50} (Oral-Rat)(mg/Kg):	No data available
	LD_{50} (Oral-Mouse)(mg/Kg):	No data available
	LD_{50} (Dermal-Rabbit)(mg/Kg):	No data available

Carcinogenicity:	NTP:	No
	IARC:	No
	OSHA Reg:	No

Reproductive Toxicity:	No data available	
Symptoms Associated with Overexposure:	Irritation, sneezing, gastrointestinal upset	
Specific Target Organ Toxicity:	Single Exposure:	No data available
	Repeated Exposure:	No data available
Target Organs:	None identified	
Medical Conditions Aggravated By Exposure:	None identified	
Routes of Entry:	Inhalation, Ingestion, skin and eye contact	
NIOSH/RTECS NO:	Not listed	

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.

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: No

SARA TITLE III:

Section 302 (EHS) Ingredients:	No
Section 313 Ingredients:	No
Section 304 (EHS/CERCLA) Ingredients:	No
Section 311/312 Hazard:	Chronic Health Hazard

California Proposition 65 List: None of the components in this product are known to cause cancer or reproductive toxicity

Massachusetts Right To Know Components:

	CAS No.
Ferrous Sulfate	7782-63-0

New Jersey Right to Know Components:

	CAS No.
Potassium Nitrate	7757-79-1

Pennsylvania Right to Know Components:

	CAS No.
Potassium Nitrate	7757-79-1
Ferrous Sulfate	7782-63-0

16. OTHER INFORMATION

HMIS Rating:	**Health Hazard**	**Chronic Health Hazard**	**Flammability**	**Physical Hazard**
	2	*	0	2
NFPA Rating:	**Health Hazard**	**Fire Hazard**	**Reactivity Hazard**	**Special Hazard**
	2	0	2	

*Chronic Hazard: Chronic (long-term) health effects may result from repeated overexposure.

16. OTHER INFORMATION

PhytoTech Labs Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. PhytoTech Labs Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY OR FURTHER MANUFACTURING USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

Revision Date: 15 August 2022