

Flower Power™

Material Safety Data Sheet (rev.12/11/09)

SECTION I
PRODUCT IDENTIFICATION
NFPA HAZARD RATINGS

HEALTH HAZARD 1 FIRE HAZARD 0 REACTIVITY 1
 Based on the National Fire Protection Association rating system
 (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = High; 4 = Severe)

SARA/ TITLE III HAZARD CATEGORIES (See Section IX)

Company Name: STOLLER USA, INC.
 Address: 4001 W. Sam Houston Parkway, N., Suite 100
 Houston, Texas 77043-1226 U.S.A.
 Emergency Phone Number: CHEMTREC: In the U.S. and Canada call Toll-free: 1(800)424-9300
 From other countries call collect: +1(703)527-3887
 Phone Number for Information: 1(800)539-5283 or 1(713)461-1493
 Chemical Family: Solution of Organic Bases and Boron
 Chemical Name & Synonyms: Liquid Fertilizer containing Boron, Zinc and Molybdenum
 Formula: Proprietary
 Trade name & Synonyms: **FLOWER POWER**

SECTION II
COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENTS:	CAS#	Approx. %	TLV
Zinc Oxide	1314-13-2	5	
Copper Hydroxide	20427-59-2	<.5	1 mg/ m ³ as Cu
Orthoboric Acid	10043-35-3	17	N/ E
Dimethyl Aminopropylamine	109-55-7	<.5	N/ E
Monoethanolamine	141-43-5	6	3 ppm
Molybdic Oxide	1313-27-5	<.1	

SECTION III
HAZARD IDENTIFICATION

A. **EXPOSURE LIMITS:** No Limits Established
 B. **CARCINOGEN OR POTENTIAL CARCINOGEN:** N/ A
 C. **EFFECTS OF OVEREXPOSURE:**
 1. **ACUTE:**
 EYES: Contact with product may cause severe irritation and possibly irreversible damage.

 SKIN: Harmful if absorbed through broken skin. Large doses may cause liver and kidney damage. May cause discomfort, injury, and death unless treated promptly.
 INHALATION: Prolonged exposure to low concentrations of vapors may cause: sore throat and headache which are temporary.
 INGESTION: May cause malaise, nausea, gastrointestinal damage, or even death.
 2. **CHRONIC:** Prolonged or repeated inhalation overexposure may cause bronchitis or pneumonia.

SECTION IV
FIRST- AID MEASURES

A. **EMERGENCY FIRST AID PROCEDURES:**
 EYES: Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
 SKIN: Remove product and immediately flush affected area with water for 15 minutes. Do not apply greases or ointments. Launder contaminated clothing.
 INHALATION: Move patient to fresh air. Supplemental oxygen may be indicated. Assure mucous does not obstruct airway. Call a physician.
 INGESTION: If swallowed, call a physician immediately. Do not induce vomiting.
 B. **ANIMAL TOXICITY DATA:**
 Oral LD₅₀ (rat): 1640 mg/ kg
 Inhalation LC₅₀(rat):>21 mg/ Liter/ Hr) No deaths) (Estimate)
 Dermal LD₅₀ (rabbit): No Data

SECTION V

FIRE AND EXPLOSION DATA

FLASH POINT:	Not Applicable (N/ A) Product is non- flammable.	LEL:	UEL:
FLAMMABLE LIMITS:	N/ A		
EXTINGUISHER MEDIA:	In case of fire use: Carbon Dioxide (CO ₂), Dry Chemical, Alcohol Foam.		
SPECIAL FIRE FIGHTING PROCEDURES:	Firefighters should wear butyl rubber boots and clothing.		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	N/ A		

SECTION VI

ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED: It is necessary to contain spill into the smallest area possible by diking, scooping, etc. Replace liquid into plastic container. If liquid is absorbed on to dry carrier such as soil or absorbent material, then this material should be held in a dry contained area.

SECTION VII

HANDLING AND STORAGE

Keep containers closed and away from oxidizing agents. Store only in shipping container: Pails (HDPE, PVC), Drums (Polyethylene) and Mini Bulk Tanks (Polyethylene). Bulk material should be stored in Polyethylene Tanks with PVC fittings.

SECTION VIII

SPECIAL PROTECTION / CONTROL MEASURES

RESPIRATORY PROTECTION: As required by emergency situation, use an OSHA or NIOSH approved respirator.
VENTILATION: Work outdoors in the open or well ventilated area with this product.
PROTECTIVE GLOVES: Wear latex, vinyl or butyl rubber gloves.
EYE PROTECTION: Use splashproof eye goggles. It is best to wear a full face shield. Eye wash should be available.
OTHER SPECIAL CLOTHING/ EQUIPMENT: Wear clothing that covers the exposed skin area as much as possible.
WORK/ HYGIENIC PRACTICES: Wash thoroughly after handling. Also wash clothing before reusing it.

SECTION IX

PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	230°F	VAPOR PRESSURE (mm/Hg):	N/ A
MELTING POINT:	N/ A	VAPOR DENSITY (air = 1):	N/ A
SPECIFIC GRAVITY:	1.28	REACTIVITY IN WATER:	0
SOLUBILITY IN WATER:	100%	EVAPORATION RATE:	N/ A
APPEARANCE AND ODOR:	Clear blue liquid - with no odor.		
PERCENT VOLATILE BY VOLUME:		N/ A	

SECTION X

PHYSICAL HAZARDS (REACTIVITY DATA)

STABILITY:	Stable: Yes	Unstable:
CONDITIONS TO AVOID:	N/ A	
INCOMPATIBILITY, MATERIALS TO AVOID:	Oxidizing Agents (perchlorates, nitrates, nitrites, etc.) and high concentrations of mineral acids.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon Monoxide, Nitrogen Oxide, Carbon Dioxide and Nitric Acid possible in a fire.	
MAY OCCUR:	Ammonia and Hydrogen Cyanide under extreme heat as with a fire.	
WILL NOT OCCUR: X		

SECTION XI**TOXICOLOGICAL INFORMATION**

- A. **TOXICITY DATA:**
- B. **CARCINOGENICITY:**
- C. **MUTAGENICITY:**
- D. **REPRODUCTIVE TOXICITY:**

SECTION XII**ENVIRONMENTAL EFFECTS DATA**

The available data on this plant nutrient material does not indicate any undue hazard to the environment under anticipated use and storage. Any waste due to spillage or leakage should be contained and disposed of as Fertilizer, not to exceed 3 lbs. of actual Boron per acre (see above under Waste Disposal Methods). If discharged into the marine environment it may be toxic to fish and other marine organisms. Due to its nutrient value, may contribute to eutrophication in bodies of water.

SECTION XIII**DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHODS: Liquid should be applied to the soil as a fertilizer not to exceed 3 gallons per acre. Product absorbed on to dry carrier should be applied to soil as a fertilizer not to exceed 50 lbs. per acre.

SECTION XIV**TRANSPORTATION DATA**

PROPER SHIPPING NAME: N/ A (Trade Name: FLOWER POWER)
DOT HAZARD CLASS: NON- REGULATED MATERIAL
PLACARD: N/ A
USDOT Proper Shipping Name: N/ A (Trade Name: FLOWER POWER)
IATA Proper Shipping Name: N/ A
IMO Proper Shipping Name: N/ A

SECTION XVI**OTHER INFORMATION**