

Vigor- S

Material Safety Data Sheet (rev.01/05)

SECTION I
PRODUCT IDENTIFICATION

	NFPA HAZARD RATINGS
	HEALTH HAZARD 1 FIRE HAZARD 0 REACTIVITY 0
	SARA/ TITLE III HAZARD CATEGORIES
	Immediate (ACUTE) Health: NO Reactive Hazard: NO
	Delayed (Chronic) Health: YES Fire Hazard: NO Sudden Release of Pressure: NO
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:	Zinc compounds
Chemical Name & Synonyms:	N/ A. Solution
Formula:	Proprietary
Trade name & Synonyms:	VIGOR S

SECTION II
PHYSICAL AND CHEMICAL CHARACTERISTICS

INGREDIENTS:	CAS#	Approx. %	TLV
Zinc sulfate	7733-02-0	25%	1 mg/ m3 as Zinc

SECTION III
PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	232°F	VAPOR PRESSURE (mm/ Hg):	
MELTING POINT:	N/ A	VAPOR DENSITY (air = 1):	N/ A
SPECIFIC GRAVITY:	1.31	REACTIVITY IN WATER:	None
SOLUBILITY IN WATER:	>99%	EVAPORATION RATE:	N/ A
APPEARANCE AND ODOR:	Dark brown liquid, slightly acrid odor.		

SECTION IV
FIRE AND EXPLOSION DATA

FLASH POINT:	N/ A		
FLAMMABLE LIMITS:		LEL: not established	UEL: not established
EXTINGUISHER MEDIA:	Water, CO ₂ , or dry chemicals		
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self- contained breathing apparatus.		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Could Evolve SO ₂ if involved in a fire.		

SECTION V**PHYSICAL HAZARDS (REACTIVITY DATA)**

STABILITY:
CONDITIONS TO AVOID:
INCOMPATIBILITY, MATERIALS TO AVOID:
HAZARDOUS DECOMPOSITION PRODUCTS:
HAZARDOUS POLYMERIZATION:
MAY OCCUR: **WILL NOT OCCUR: X**

Stable: Yes Unstable:
 N/ A
 Oxidizers
 not known
 not known

SECTION VI**HEALTH HAZARDS**

A. EXPOSURE LIMITS:
 1. OSHA Permissible Exposure Limit (PEL): Not established
 2. Threshold Limit Value (TLV): 1 mg/ m3 as Zn

B. CARCINOGEN OR POTENTIAL CARCINOGEN:
 1. NPT: N/ A
 2. IARC: N/ A
 3. OSHA: N/ A

C. EFFECTS OF OVEREXPOSURE:
 1. **ACUTE:**
EYES: May cause irritation or ulceration.
SKIN: May cause irritation
INHALATION: May cause irritation. May cause pulmonary edema at high exposure rates.
INGESTION: Nausea, vomiting, diarrhea.
 2. **CHRONIC:** Not known.

D. EMERGENCY FIRST AID PROCEDURES:
EYES: Rinse thoroughly with running water for 15 minutes. Seek medical help.
SKIN: Wash thoroughly with soap and water. Rinse thoroughly. Seek medical attention if inflammation occurs. Do not attempt to neutralize with chemicals.
INHALATION: Remove from exposure area. If irritation exists from mists, or in the event of massive inhalation, seek medical attention.
INGESTION: Give at least 2 glasses of milk or water and induce vomiting. Seek medical attention.

E. ANIMAL TOXICITY DATA:
 Oral LD₅₀ (rat): 1300 mg/ kg

SECTION VII**SPECIAL PRECAUTIONS & SPILL/ LEAK PROCEDURES**

HANDLING AND STORAGE: Since emptied packages retain product residue follow label warnings even after package is emptied. Store in a cool dry place, away from direct sunlight.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED: Collect and contain for salvage and disposal. Absorb waste on inert media and dispose of as solid waste.

WASTE DISPOSAL METHODS: Landfill in compliance with all federal, state and local laws concerning health and environment.

SECTION VIII**SPECIAL PROTECTION / CONTROL MEASURES**

RESPIRATORY PROTECTION: As required by conditions. Use an OSHA or NIOSH approved respirator, if required.

LOCAL EXHAUST: Use if needed for safe, comfortable working conditions.

SPECIAL VENTILATION: General ventilation is usually adequate.

PROTECTIVE GLOVES: Gloves impervious to liquids should be worn.

EYE PROTECTION: Safety glasses should be worn in any type of operation.

WORK/ HYGIENIC PRACTICES: An eye bath and washing facilities should be available. Wash thoroughly after handling. Do not smoke when handling chemicals.

SECTION IX**ENVIRONMENTAL EFFECTS DATA**

No environmental impact studies have been performed with this product. A review of the information available on the ingredients does not indicate any potential hazard to the environment under anticipated conditions of storage, handling or usage.

SECTION X**TRANSPORTATION DATA**

PROPER SHIPPING NAME: VIGOR S

DOT HAZARD CLASS: Non- Regulated Material; Non- Hazardous Material

PLACARD: N/ A

USDOT Proper Shipping Name: VIGOR S

IATA Proper Shipping Name: N/ A

IMO Proper Shipping Name: N/ A

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