



MATERIAL SAFETY DATA SHEET

I. PRODUCT INFORMATION

Trade Name: Combination Fountain Solution, 457
Chemical names, common names: Complex water based solution
Manufacturer's Name: HURST CHEMICAL COMPANY
Address: 2500 San Fernando Road, Los Angeles, CA. 90065
DOT Information: Fountain Solution, (Not regulated)
For Product Information, call : (323) 223-4121
FOR EMERGENCY, CALL CHEMTREC, 24 HOUR: 800 424-9300

II. HAZARDOUS INGREDIENTS

Chemical Names	CAS Number	Exposure Limits in Air	
		ACGIH (TWA)	OSHA (PEL)
Phosphoric Acid	7664-38-2	1mg/m3	1mg/m3
Magnesium Nitrate	13446-18-9	Not Established	

Section IIA - This product contains the following chemicals subject to reporting requirements of SARA 313 and 40 CFR 372.

Listed Ingredients	CAS Number	Weight % Range
Phosphoric Acid	7664-38-2	1%

III. PHYSICAL PROPERTIES

Vapor density (air = 1): <1
Solubility in water: Complete
Evaporation rate (Bu Ac = 1): <1
Appearance and odor: Blue green liquid, mild odor
Volatile Organic Content (VOC, EPA Method 24): 0-gm/l or 0-lb/gal

Specific Gravity: 1.06
Density lb/gal: 8.9
VOC Composite Partial Pressure, mm Hg at 20°C: <1
Boiling Range °F: 212
PH = 3.0

IV. FIRE AND EXPLOSION

HAZARD RANKING			
HMIS	Health Hazard=1	0=Least	4=Extreme
HAZARD	Flammability=0	1=Slight	
CLASS	Reactivity= 0	2=Moderate	
	Other = B	3 = High	
		B=Safety Goggles and Gloves	

Flash Point °F: > 200

Flammable limits in air, volume%: lower: n/a upper: n/a
Fire extinguishing materials: water spray carbon dioxide foam
 dry chemical other

Special firefighting procedures: This product contains magnesium nitrate which is an oxidizer. Avoid allowing product to evaporate to dryness.

Unusual fire and explosion hazard: The heat of reaction with reducing agents or combustibles may cause ignition, then use, foam or dry chemical.

V. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE FOR EACH POTENTIAL ROUTE OF EXPOSURE -

Inhaled: May cause mild irritation to the mucous membranes.
Contact with skin or eyes: Vapors, mists, and liquid are corrosive to the eyes and skin.
Absorbed through skin: May cause skin irritation, redness and pain.
Swallowed: Large doses of nitrates may cause dizziness, abdominal pain, vomiting and collapse.

HEALTH EFFECTS OR RISKS FROM EXPOSURE -

Acute: Irritation of eye and skin.
Chronic: Skin tissue destruction, respiratory illness.

FIRST AID: EMERGENCY PROCEDURES -

Eye Contact: Flush with water for 15 minutes, seek medical attention as a precautionary action

Skin Contact: Wash with soap and water, remove contaminated clothing

Inhaled: Remove victim to fresh air

Swallowed: Contact local poison control center or physician IMMEDIATELY!

COMMENTS: This product is not considered to be a carcinogen by the NTP, IARC, and OSHA.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE: Persons with pre-existing skin disorders, eye problems or respiratory function may be more susceptible to the effects of this product.

RECOMMENDATIONS TO PHYSICIAN-Not applicable

VI. REACTIVITY DATA

Stability: Stable under ordinary use and storage.

Incompatibility (materials to avoid): strong oxidizing agents.

Hazardous Decomposition products (including combustion products): carbon dioxide, carbon monoxide.

Hazardous polymerization: Will not occur.

VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

Spill response procedures: Wear personal protective equipment. Keep spills out drains, sewers or waterways. Use sand or inert materials to dam and contain spill.

Preparing wastes for disposal: Dispose of in accordance with Local, State, and Federal regulations.

VIII. SPECIAL HANDLING INFORMATION

Ventilation and engineering controls: use with adequate ventilation

Respiratory Protection: not necessary.

Eye Protection: If splash potential exists wear chemical splash goggles or face shield

Gloves: Using gloves is advisable to prevent repeated or prolonged skin contact.

Other clothing and equipment: Eye wash and quick drench shower facilities should be available in the work area.

Thoroughly clean shoes and wash contaminated clothing before reuse.

Work practices, hygienic practices: Practice personal cleanliness by prompt removal of chemicals in contact with skin.

Train all employees on special handling procedures prior to working with this product.

OTHER HANDLING AND STORAGE REQUIREMENTS:

Keep containers tightly closed. Keep containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

HURST CHEMICAL COMPANY furnishes Material Safety Data Sheets based upon information from raw material suppliers. This information is provided in compliance with Federal Regulation 29CFR 1910.

HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.

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