MATERIAL SAFETY DATA SHEET

=1. PRODUCT INFORMATION=

Trade Name: No. 306 Universal Fountain Concentrate

Chemical names, common names: Complex Water Base Solution

Manufacturer's Name: HURST GRAPHICS

Address: 2500 San Fernando Road Los Angeles, CA 90065

Business/Emergency Phone Number: (213) 223-4121:

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		Exposure Limits in Air	
Chemical Names	CAS Number	ACGIH (TWA)	OSHA (PEL)
2 Butoxyethanol	111-76-2	25 ppm	25 ppm
Trihydric alcohol	56-81 - 5	10 mg/m ³ (mist)	5mg/m ³ TWA
Phosphoric acid	7664-38-2	1 mg/m ³	1mg/m ³ TWA
Ethylene glycol	107-21-1	50 ppm Ceil.	50 ppm Ceil
Isopropanol	67-63-0	400 ppm	400 ppm TWA

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
2 Butoxyethanol	111-76-2	8.0 - 10.00
phosphoric acid	7664-38-2	0.02-0.03
Ethylene glycol	107-21-1	3.0 - 5.0

——III, PHYSICAL PROPERTIES—

Vapor density (air= 1): <1

Specific Gravity: 1.02

Solubility in water: 100%

Vapor Pressure,mmHg at 20°C; 18

Evaporation rate (Bu Ac=1): <1

Boiling Range °F: 180-388

Appearance and odor: Clear pink solution with glycol ether odor Volatile Organic Content (VOC):

209 gm/1 or 1.74 lb/gal IV. FIRE AND EXPLOSION

HAZARD RANKING

<u>HMIS</u>	Health Hazard=1	0=Least
<u>HAZARD</u>	Flammability=1	1=Slight
CLASS	Reactivity= 0	2=Moderate
	Other = -	3=High
		4=Extreme

Flash Point °F: >200

Flammable limits in air.volume%: lower Not Available upper Not available

Fire extinguishing materials:

No water spray

No carbon dioxide

No dry chemical No foam

Yes_other

Special firefighting procedures: The product is not flammable. However vapors exposed to heat or open flame may separate and become flammable. Then use Dry chemical or foam to extinguish. Unusual fire and explosion bazard: Not Known.

V. SYMPTOMS OF OVEREXPOSURE FOR EACH POTENTIAL ROUTE OF EXPOSURE-

Inhaled: This product has low degree of toxicity. Breathing high concentrations of vapors or mists may cause irritation of nose & throat; signs of nervous system & depression.

Contact with skin or eves: This material may cause skin and eye irritation. Direct contact may cause redness, tearing & burning of the eyes, and redness, drying & cracking of skin.

Absorbed through skin: No harmful effects through skin absorption.

Swallowed: Irritation of digestive tract, signs of nervous system, depression, visual disturbances, Kidney damage, convulsions, coma.

HEALTH EFFECTS OR RISKS FROM EXPOSURE-

Acute: Eye, Skin & digestive track irritation.

Chronic: Kidney damage & visual disturbances.

FIRST AID: EMERGENCY PROCEDURES

Eve Contact: For direct contact, hold eyelids apart and flush the affected eye (s) with clean water for 15 minutes, seek medical attention.

Skin Contact: Remove contaminated clothing, cleanse affected area (s) thoroughly by washing with mild soap & water. If irritation or redness develops, seek medical attention.

Inhaled: Move victim away from source of exposure and into fresh air. If symptoms appear seek medical attention.

Swallowed: Seek immediate medical attention. If victim is conscious vomiting should be induced for ingestion of more than 1 - 2 tbsp. preferably with syrup of ipecac under direction from a physician or poision center. If syrup of ipecac is not available, vomiting can be induced by gently placing 2 fingers in the back of throat. Do not leave victim unattended.

COMMENTS: This substance has not been identified as a carcinogen or probable carcinogen by NTP, IARC or OSHA. A component in this material is a probable hazard to the fetus based on tests with laboratory animals.

Pre existing kidney disorders may be aggravated by exposure to this material.

Reports have associated repeated and prolonged occupational over exposure to solvents with permanent brain & nervous system damage, (Sometimes referred to as solvent or painter's syndrome). Intentional misuse by deliberately concentrating & inhaling this product may be harmful or fatal.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE: Pre-existing skin disorders, lung disorders, may be aggravated by exposure to this material.

RECOMMENDATIONS TO PHYSICIAN- This product contains ethylene glycol. Toxic metabolites of this product may cause acidosis, coma, convulsions, renal failure or circulatory collapse. Ethanol blocks the formation of glycolic acid & therefore is the antidote of choice. Because of the rapid conversion (3 hour elimination half-life) of ethylene glycol, ethanol should be administered as soon as possible in cases of severe poisoning. If medical care will be delayed several hours, use 3-4 one-ounce oral (shots) of 86 proof whiskey before or during transport to the hospital. Hemodialysis effectively removes ethylene glycol and glycolic acid from the body. A two year study of ethylene glycol in laboratory animals resulted in kidney damage.

==VI. REACTIVITY DATA=

Stability: Stable under ordinary use & storage.

Incompatibility (materials to avoid): Incompatible with strong oxidizing agents, anhydride, isocyanate, acetaldehyde, chlorine, ethylene oxide, hydrogen peroxide, aluminum and organometallic contaminates. Hazardous Decomposition products (including combustion products): Carbon monoxide/ or carbon dioxide, oxides of nitrogen.

Hazardous polymerization: Will not occur.

=VIL SPILL, LEAK, AND DISPOSAL PROCEDURES=

Spill response procedures: For small spills, do not flush with water, use absorbant pads. Keep out of drains, sewers or waterways. Use sand or other, inert material to dam and contain spill. For large spill, contact fire authorities & appropriate federal, state or local agencies.

Preparing wastes for disposal: Dispose of product in accordance with Local, County, State & federal regulations.

—VIII. SPECIAL HANDLING INFORMATION—

<u>Ventilation and engineering controls:</u> Normal shop ventilation is adequate. Floor ventilation is preferred. Respiratory Protection: In working atmosphere where TLV or PEL levels are exceeded, use NIOSH approved chemical cartridge respirator.

Eye Protection: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

Gloves: The use of gloves impermeable to the specific material handled is advised to prevent skin contact & possible irritation.

Other clothing and equipment: It is suggested that a source of clean water be available in work area for flushing eyes & skin. Impervious clothing should be worn as needed.

Work practices, hygienic practices: Practice personal cleanliness by prompt removal of solvent in contact with skin. Train all employees on special handling procedures prior to working with this product.

OTHER HANDLING AND STORAGE REOUTREMENTS:

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.

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DATE PREPARED: SEPTEMBER 1989

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