

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT/MANUFACTURER'S IDENTITY

PRODUCT NAME: FORMULA FOUR-PART A

PRODUCT I.D. NUMBER (PIN): 1719

PRODUCT NUMBER: NA

H.M.I.S.

PRODUCT USE: Industrial degreaser manufacturing concentrate

WHMIS CLASS: E; D2B

DOT HAZARD CLASS: Corrosive Material

COMPANY:

P.B. Gast & Sons Co., Inc.
P.O. Box 7349
Grand Rapids, MI 49510-7349

DOT SHIPPING NAME:

Caustic Alkali Liquid, N.O.S.
(Potassium hydroxide)
8, UN1719, PGIII

		HAZARD RATING
3	HEALTH	4 = Extreme 3 = High 2 = Moderate 1 = Slight 0 = Insignificant
0	FIRE	
1	REACTIVITY	
C	MAXIMUM PERSONAL PROTECTION	

A = Goggles B = Goggles & Gloves C = Goggles, Gloves & Apron

EMERGENCY PHONE: 800-843-6174

ABBREVIATION KEY: N.A. - Not Applicable N.E. = Not Established N.D. = Not Determined

SECTION 2 - HAZARDOUS INGREDIENTS INFORMATION

HAZARDOUS CHEMICAL IDENTITY	CAS NO.	%	PEL	TLV	LD50	LC50
Water	7732-18-5	10-30	N.E.	N.E.	N.D.	N.D.
Potassium hydroxide	1310-58-3	30-60	2mg/m ³	2mg/m ³	365mg/kg	N.D.
Tetrasodium EDTA	64-02-8	60-100	N.E.	N.E.	4100mg/kg	N.D.
Silicic acid, Potassium salt	1312-76-1	1-5	N.E.	N.E.	N.D.	N.D.

This mixture does not contain components which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR, Part 372.

SECTION 3 - PHYSICAL DATA

Color: Colorless	Boiling Point: 100°C (212°F)	Vapor Pressure: <30 mm of Hg	pH: 13.5 - 14.0
Odor: Bland	Freezing Point: 0°C (32°F)	Vapor Density (Air=1): <1	1% pH: 12.2
Physical State: Liquid	Water/Oil Distribution: N.E.	Evaporation Rate (Water=1): N.E.	Specific Gravity: 1.39 gm/ml
Solubility in Water: Complete	Odor Threshold: N.E.	VOC Content: 0.0%	Weight per Gallon: 11.59 lbs./gal.

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method: N.A.	Autoignition Temperature: N.A.	Extinguishing Media: Use dry chemical or CO ₂ .
Flammable Limits: N.A.	LEL: N.A. UEL: N.A.	Special Fire Fighting Procedures: Use proper protective equipment.
Hazardous Combustion Products: N.A.		Unusual Fire and Explosion Hazards: None.

SECTION 5 - REACTIVITY DATA

Chemical Stability: Stable.	Hazardous decomposition of By-Products: None known.
Incompatibility (Materials to Avoid): Acids, aluminum and other soft metals.	Hazardous Polymerization: Will not occur.

SECTION 6 - TOXICOLOGICAL PROPERTIES

Routes of Entry: Ingestion. Inhalation. Skin contact. Eye contact.	Toxicologically Synergistic Products: None known.
Sensitization: No.	Medical Conditions Aggravated by Exposure: None known.
EFFECTS OF OVEREXPOSURE (Acute and/or Chronic):	
Eyes: May cause severe irritation, redness, burns and possible corneal injury.	Carcinogenic Effects: NO carcinogenic effect.
Skin: May cause severe irritation, redness, burns.	Mutagenic Effects: NO mutagenic effect.
Ingestion: May cause severe irritation or burning of gastrointestinal tract and possible mucosal injury.	Teratogenic Effects: NO teratogenic effect.
Inhalation: May irritate respiratory tract when used with inadequate ventilation.	Reproductive Toxicity: NO reproductive toxicity effect.

SECTION 7 - PREVENTATIVE AND CONTROL MEASURES

Respiratory Protection: None normally required with adequate ventilation.	Ventilation: Local Exhaust: Acceptable Mechanical: Recommended
Protective Gloves: Rubber/Neoprene.	Eye Protection: Chemical splash goggles.
Protective Clothing and Equipment: Full cover clothing - rubber apron.	Work and Hygienic Practices: Wash thoroughly after handling.
Storage Requirements: Store in cool, dry area. Follow good housekeeping practices.	Other Requirements: Keep out of reach of children.

Steps to be Taken if Material is Spilled or Released: Collect and reuse if possible. Dilute and flush to sewer with large quantities of water if permitted by regulatory authorities or absorb on inert material (sand, clay, etc.) and place into container for proper disposal. Do not allow runoff into public waterways.

Waste Disposal: Dispose of as permitted by all federal, provincial, state and local regulatory authorities.

SECTION 8 - EMERGENCY FIRST AID PROCEDURES

FIRST AID - NOTES TO PHYSICIAN:

Eyes: Flush with a large amount of water for 30 minutes holding eyelids open. Seek medical attention.

Skin: Remove contaminated clothing and footwear. Flood/shower with water for 30 minutes.

Ingestion: Rinse mouth with water. Give 2-3 large glasses of water. Do not induce vomiting. Seek medical attention.

Inhalation: Remove to fresh air and rest. In all cases if symptoms persist, seek medical attention.

Note to Physician: No additional information.

SECTION 9 - PREPARATION INFORMATION

Prepared By: Regulatory Affairs Department

Phone: 616-245-0574

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