GFS CHEMICALS, INC.
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MATERIAL SAFETY DATA SHEET

1712

BORON ICP STANDARD

CHEMICAL NAME & SYNONYMS	DOT CLASS	SARA TITLE 313
Boron ICP Standard, 1,000 ppm	NR	No
	TSCA listed - Yes	

FORMULA	REPORTABLE QUANTITY	F.W.	CAS#
H_3BO_3 < 1%	N/A	61.83	10043-35-3
NH_4OH <0.5%	454 kg	35.05	1336-21-6
H_2O > 98%	N/A	18.02	7732-18-5

PHYSICAL DATA
Density 1.0; Boiling point about 100°C; Completely miscible with water; >99% volatile.

APPEARANCE & ODOR
Clear, colorless liquid. May have faint odor of ammonia.

REACTIVITY & CONDITIONS TO AVOID
Stable. No hazardous self-reaction. Incompatible with alkali metals. Protect from heat and direct sunlight.

FIRE HAZARDS
Will be consumed in a general fire. May release fumes of ammonia, oxides of nitrogen and oxides of boron. Firefighters wear SCBA.

EXTINGUISHER	FLASHPOINT	LEL	UEL
Fight surrounding fire.	N/A	N/A	N/A

HEALTH HAZARDS
Irritating to eyes in high concentrations. LD_{50} (oral-rat) 2660 mg (boric acid)/kg; LC_{50} (inhl-rat) 2000 ppm (ammonia)/4 hours. Symptoms of exposure: nausea, vomiting, diarrhea, drowsiness, coma, death. Not absorbed through intact skin or eyes. For ammonia, OSHA PEL: TWA 50 ppm; ACGIH TLV TWA: 25 ppm; STEL 35 ppm. No evidence of carcinogenicity.

SPECIAL PRECAUTIONS
Use goggles and protective gloves while handling. Use good ventilation if fumes are generated.

FIRST AID
Wash skin or eyes thoroughly with water. If swallowed, give water with milk of magnesia or milk and get medical attention. Do not induce vomiting.

SPILLS & LEAKS
Wash up with water. Disposal to sanitary drain. Check local regulations.

CATALOG #	PREPARED BY	DATE
1712	MDM	December 20, 2005