

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Boric Acid 5.0%
Use/Size Additive
Product Numbers A component of #7000, #7052, #7071, #8000, #9100, #9500
Manufacturer/Supplier Tyco Healthcare/ Kendall
Address 15 Hampshire Street
Mansfield, MA 02048
Phone Number (508) 261-8000 (Monday – Friday 8:00 am to 5:00 pm)
Chemtrec Number (800) 424-9300
Revision Date: January 30, 2004
MSDS Date:

This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name	CAS#/Codes	Concentration	R Phrases	Classification
Boric Acid	10043-35-3 233-139-2	5.00%	R-None	None

3. HAZARD IDENTIFICATION

EU Main Hazards
Not classified as hazardous.

Routes of Entry

- Eye contact - Skin contact – inhalation – skin absorption

Carcinogenic Status

Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs

- Eye - Skin - Respiratory System – Liver – Kidney – Central Nervous System

Health Effects - Eyes

May cause irritation.

Health Effects - Skin

Material may cause irritation. Material may be absorbed through the skin.

Health Effects - Ingestion

Ingestion of large quantities may cause nausea, vomiting, gastrointestinal irritation, liver damage, kidney damage, damage to central nervous system and circulatory failure, convulsions and death.

Health Effects - Inhalation

May cause irritation.

4. FIRST AID MEASURES

Eyes

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

4. FIRST AID MEASURES

Skin

Wash skin with plenty of water for at least 15 minutes. Obtain medical attention if soreness or redness persists.

Ingestion

Induce vomiting as directed by a physician. Have victim drink 1-3 glasses of water to dilute stomach contents. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing. Obtain medical attention immediately.

Inhalation

Remove to fresh air. Seek medical attention if symptoms persist.

Advice to Physicians

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media

Use foam, dry chemical or carbon dioxide.

Unusual Fire and Explosion Hazards

This product may give rise to hazardous fumes in a fire.

Protective Equipment for Fire-Fighting

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Use absorbent material to collect solution and control discharge. Ventilate the area. Wear appropriate protective clothing. Prevent the material from entering drains or watercourses. Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Use in well ventilated area. When used in large volumes use local exhaust ventilation. When used in small quantities good general room ventilation is expected to be adequate to control exposures. Keep container tightly closed when not in use. Avoid contact with eyes, skin and clothing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards

Exposure limits are listed below, if they exist.

Boric Acid

None assigned.

Engineering Control Measures

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions to keep airborne levels at acceptable levels, as appropriate.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection

Respiratory protection not normally required.

Hand Protection

Chemical resistant gloves.

Eye Protection

Chemical goggles or safety glasses with side shields

Body Protection

Normal workwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless
Odor	Odorless
pH	4.8
Specific Gravity	1.0
Boiling Range/Point (°C/F)	100 / 212
Flash Point (PMCC) (°C/F)	Not flammable
Auto-flammability (deg C)	No data.
Explosion Limits (%)	No data.
Vapor Pressure	Not applicable
Density	No data.
Solubility in Water	Insoluble
Vapor Density (Air = 1)	Not applicable.
Viscosity (cSt)	No data.

10. STABILITY AND REACTIVITY

Stability

Stable

Conditions to Avoid

- Heat - High temperatures

Materials to Avoid

- potassium – strong bases

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

- acrid smoke and irritating fumes - oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Oral LD50 (rat): 2660 mg/kg

Subcutaneous LD50 (rat): 1400 mg/kg

Chronic Toxicity/Carcinogenicity

This product is not expected to cause long-term adverse health effects.

Genotoxicity

This product is not expected to cause any mutagenic effects.

Reproductive/Developmental Toxicity

This product is not expected to cause reproductive or developmental health effects.

12. ECOLOGICAL INFORMATION

Mobility

No relevant studies identified.

Persistence/Degradability

No relevant studies identified.

Bio-accumulation

No relevant studies identified.

Ecotoxicity

No relevant studies identified.

13. DISPOSAL

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Not Regulated
UN Proper Shipping Name	Not Regulated
UN Class	None.
UN Number	None.
UN Packaging Group	None.
Classification for AIR Transportation (IATA)	Consult current IATA Regulations prior to shipping by air.

15. REGULATORY INFORMATION

EU Label Information

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

EU Hazard Symbol and Indication of Danger

According to EC Commission Directive 67/548/EEC this product is not classified.

R phrases

None.

S phrases

None.

15. REGULATORY INFORMATION

US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS

TSCA Listing

All ingredients have been verified for inclusion on the EPA Toxic Substance Control Act Chemical

Substance Inventory.

EINECS Listing

All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or the European List of New Chemical Substances (ELINCS) or are exempt from listing.

DSL/NDSL (Canadian) Listing

All ingredient(s) in this product are listed on the Domestic Substance List (DSL).

MA Right To Know Law

This product does not contain any chemicals listed on the Massachusetts Right To Know Substance List.

PA Right To Know Law

This product does not contain any chemicals on the Pennsylvania Hazardous Substance List.

NJ Right To Know Law

This product does not contain any chemicals on the New Jersey Workplace Hazardous Substance List.

California Proposition 65

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

SARA Title III Sect. 302 (EHS)

This product does not contain any chemicals subject to SARA Title III Section 302.

SARA Title III Sect. 304

This product does not contain any chemicals subject to SARA Title III Section 304.

SARA Title III Sect. 311/312 Categorization

This product does not meet any of the SARA Title III Section 311/312 categorizations.

SARA Title III Sect. 313

This product does not contain a chemical that is listed in Section 313 at or above de minimis concentrations.

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 0

NFPA Code for Health - 1

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - 0

HMIS Ratings

HMIS Code for Flammability - 0

HMIS Code for Health - 1

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

16. OTHER INFORMATION

Abbreviations

N/A: Denotes no applicable information found or available

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit



MATERIAL SAFETY DATA SHEET
Boric Acid 5.0%

STEL: Short Term Exposure Limit
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
EU: European Union
R: Risk
S: Safety
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
BOD: Biological Oxygen Demand
KoC: Soil Organic Carbon Partition Coefficient

Prepared By: EnviroNet LLC.

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