Product ID:160 BORIC ACID MSDS Date:10/27/1987 FSC:6810 NIIN:00F025816 MSDS Number: BPSVR === Responsible Party === Company Name: E M SCIENCE DIV OF E M IND INC Address:111 WOODCREST ROAD City:CHERRY HILL State:NJ ZIP:08034-0395 Country:US Info Phone Num:609-354-9200 Emergency Phone Num:513-631-0445 CAGE:63612 === Contractor Identification === Company Name: E M SCIENCE DIV OF E M INDUSTRIES INC Address:480 DEMOCRAT ROAD Box:70 City:GIBBSTOWN State:NJ ZIP:08027 Country:US Phone:800-222-0342/609-423-6300 CAGE:63612 Company Name:FALCON CAGE:08474

Ingred Name:BORIC ACID, ORTHOBORIC ACID CAS:10043-35-3 RTECS #:ED4550000

LD50 LC50 Mixture:ORAL LD50 (RAT): 2660 MG/KG Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:INHALATION: HARMFUL. EYES: IRRITATION. SKIN: IRRITATION, TOXIC ABSORPTION THROUGH WOUNDS OR MUCOUS MEMBRANES. INGESTION: HARMFUL, GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA, CIRCULATORY F AILURE, COMA, FATAL. Explanation of Carcinogenicity:NONE Effects of Overexposure:INGESTION: KIDNEY & LIVER DAMAGE. Medical Cond Aggravated by Exposure:SKIN DISORDERS OR EYE PROBLEMS, IMPAIRED LIVER, KIDNEY, OR RESPIRATORY FUNCTION

First Aid:SKIN: IMMEDIATELY FLUSH THOROUGHLY W/LARGE AMOUNTS OF WATER. EYES: IMMEDIATELY FLUSH THOROUGHLY W/WATER FOR AT LEAST 15 MINS. INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. INGESTION: IF CONSCIOUS, INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Flash Point:NON-COMBUSTIBLE Extinguishing Media:USE ANY SUITABLE MEDIA FOR ADJACENT MATERIAL. Fire Fighting Procedures:WEAR SELF-CONTAINED, POSITIVE PRESSURE, BREATHING APPARATUS. Unusual Fire/Explosion Hazard:A MIXTURE OF BORIC ACID & POTASSIUM CAN EXPLODE ON IMPACT.

Spill Release Procedures: TAKE UP & CONTAINERIZE FOR PROPER DISPOSAL.

_____ Handling and Storage _____

Handling and Storage Precautions:KEEP CONTAINER CLOSED TIGHTLY. DON'T BREATHE DUST. AVOID CONTACT W/EYES, SKIN, OR CLOTHING. DON'T TAKE INTERNALLY. Other Precautions:MOISTURE CONTAMINATION CAN CAUSE BORIC ACID TO BE CORROSIVE TO IRON.

====== Exposure Controls/Personal Protection ==========

Respiratory Protection:NIOSH/MSHA-APPROVED RESPIRATOR SHOULD BE WORN IN THE ABSENCE OF ADEQUATE VENTILATION. Ventilation:USE APPROVED FUME HOOD OR ADEQUATE VENTILATION WHEN HANDLING OR TRANSFERRING MATERIAL. Protective Gloves:NATURAL RUBBER/NEOPRENE/NITRILE Eye Protection:SAFETY GLASSES W/SIDE SHIELDS Other Protective Equipment:EYE WASH & SAFETY EQUIPMENT Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. Supplemental Safety and Health

Boiling Pt:B.P. Text:DECOMPOSES Melt/Freeze Pt:M.P/F.P Text:185C Vapor Pres:2.6 Spec Gravity:1.435 Solubility in Water:5% Appearance and Odor:WHITE POWDER OR GRANULES, ODORLESS. _____ Stability and Reactivity Data _____

Stability Indicator/Materials to Avoid:YES WATER, POTASSIUM, ACETIC ANHYDRIDE, ALKALIES, CARBONATES, & HYDROXIDES Stability Condition to Avoid:MOISTURE CONTAMINATION Hazardous Decomposition Products:BORON OXIDE

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE W/LOCAL, STATE, & FEDERAL REGULATIONS.

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