

Company, Inc.

11730 PHILLIPS HIGHWAY
JACKSONVILLE, FLORIDA 32256

MATERIAL SAFETY DATA SHEET

Meeting OSHA Standard 29 CFR § 1910.1200 (g)

EFFECTIVE DATE: October 1, 1990

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SECTION I

MANUFACTURER'S NAME

THE JOHN GIRVAN COMPANY, INC.

EMERGENCY TELEPHONE NO.

1-800-356-6460 / 904-260-4505

TRADE NAME AND SYNONYMS

PROTEAM PRODUCTS/PROTEAM SUPREME

U.S. Patent #4594091

EPA Reg. No. 51708-11

CHEMICAL NAME AND SYNONYMS

SODIUM TETRABORATE PENTAHYDRATE

CHEMICAL FAMILY

BORATE

FORMULA

$\text{Na}_2\text{B}_4\text{O}_7 \cdot 5\text{H}_2\text{O}$

SECTION II - HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT

SODIUM TETRABORATE PENTAHYDRATE >99.5% CAS NO: 1330-43-4

SECTION III - PHYSICAL DATA

MELTING POINT (°F)

200° C.

SPECIFIC GRAVITY (H₂O = 1)

1,815

VAPOR PRESSURE (mm Hg.)

NEGLIGIBLE

PH 3% SOLUTION

9.25 @ 20° C.

VAPOR DENSITY (AIR = 1)

SOLUBILITY IN WATER

20° C. @ 3.59%

100° C. @ 50.13%

APPEARANCE AND ODOR

WHITE, ODORLESS CRYSTALLINE SOLID

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)

NONE

FLAMMABLE LIMITS

EXTINGUISHING MEDIA

NONE REQUIRED

SPECIAL FIRE FIGHTING PROCEDURES

NONE REQUIRED

UNUSUAL FIRE AND EXPLOSION HAZARDS

PRODUCT IS AN INHERENT FIRE RETARDANT

The John Girvan Company, Inc.

established 1969

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TOLL FREE NUMBER 1-800-356-6460 • FAX (904) 268-6861

THRESHOLD LIMIT VALUE

1 mg/m³

TOXICITY

NOT LISTED IN THE NATIONAL TOXICOLOGY PROGRAM ANNUAL REPORT ON CARCINOGENS (1989)

NOT LISTED IN THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPH

NOT LISTED ON THE OSHA CARCINOGENS LIST

TRACE ELEMENTS ARE SO LOW NO CURRENT TESTING METHOD EXISTS TO DETECT WHEN USED AT EPA REGISTERED TREATMENT LEVELS

SECTION IV - HEALTH HAZARD INFORMATION

EFFECTS OF ACUTE EXPOSURE

INGESTION:

ACUTE ORAL LD₅₀: 3.4-3.8 gram/kg of body weight (Sprague-Dawley rats)

HUMAN ACCIDENTAL EXPOSURE: Anticipated symptoms: nausea, vomiting, diarrhea. After 24 hours, erythema; macular skin rash, and dizziness may occur.

EYE: Irritant (rabbits - per 16 CFR §1500.42) Prohuman eye irritant in granular form. EPA registered label pool treatment reduces eye and skin irritation.

DERMAL:

ACUTE DERMAL LD₅₀: Greater than 2.0 gram/kg of body weight (rabbits - per 16 CRF §1500.40)

PRIMARY SKIN IRRITATION INDEX: 0 - no effect (rabbits - per 16 CFR §1500.41)

SKIN: No known adverse effects to humans with intact skin. May be absorbed through damaged skin.

CORROSIVE: This product is non-corrosive.

INHALATION: Nuisance dust, may cause sneezing and coughing if exposed to high concentrations (>10 mg/m³).

EFFECTS OF CHRONIC OVEREXPOSURE

INGESTION: Animal testing for carcinogenicity of borates has been negative.

DERMAL: No evidence of effect from exposure on intact human skin.

INHALATION: As with any nuisance dusts, may aggravate chronic respiratory ailments such as asthma, bronchitis, etc.

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Ingestion-nausea, vomiting, diarrhea. After 24 hours erythema, macular skin rash, dizziness may occur.

EMERGENCY AND FIRST AID PROCEDURES

Induce emesis. Drink large amounts of water or milk. Consult physician.

SECTION VI - REACTIVITY DATA

STABILITY: Proteam Supreme is a stable product.

INCOMPATIBILITY (MATERIALS TO AVOID): Elemental Zirconium (hot)

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION WILL NOT OCCUR:

CONDITIONS TO AVOID: Contact with elemental zirconium (mixture explodes when heated).

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep or vacuum followed by water rinse.

WASTE DISPOSAL METHOD Refer to local disposal requirements and regulations for waste disposal methods. Not regulated under §313 of SARA Title III or RCRA (40 CFT 261.33)

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RESPIRATION PROTECTION (SPECIFY TYPE): Recommended use of light duty dust mask (such as 3M model 5800) in areas of airborne concentrations greater than 10mg/m³. (Plant applications).

VENTILATION: Local exhaust is sufficient when handling material in plant applications.

PROTECTIVE GLOVES: Leather, cloth or rubber gloves.

EYE PROTECTION: Avoid eye contact. Dust goggles are recommended in areas of high airborne concentrations.

OTHER PROTECTIVE EQUIPMENT: None.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Dry indoor storage.

OTHER PRECAUTIONS: Retain package integrity.

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