

**SPARKLE:
MATERIAL SAFETY DATA SHEET**

SECTION I - PRODUCT IDENTIFICATION

NFPA HAZARD RATINGS

HEALTH HAZARD 3 FIRE HAZARD 1 REACTIVITY 0

Based on the National Fire Protection Association rating system

(0 = Minimal; 1 = Slight; 2 = Moderate; 3 = High; 4 = Severe)

SARA/TITLE III HAZARD CATEGORIES (See Section XV)

Immediate (Acute) Health: YES Delayed (Chronic) Health: YES

Reactive Hazard: NO Fire Hazard: NO Sudden Release of Pressure: NO

Company Name: NPK INDUSTRIES

Address: 1600 SKY PARK DR. MEDFORD, OR 97504

Phone Number for Information: 1 (800) 994-4508

Emergency Phone Number, CHEMTREC for NPK INDUSTRIES

In the US and Canada call toll-free 1 (800) 424-9300

From all other countries call collect: +1 (703) 527-3887

Chemical Name & Synonyms: Liquid Fertilizer containing Boron and Molybdenum

Formula: Proprietary

Tradename & Synonyms: **SPARKLE**

SECTION II - COMPOSITION / INFORMATION ON INGREDIENTS

ACTIVE INGREDIENTS: CAS # Approx. % TLV

Boric Acid 10043-35-3 17 Not Established (N/E)

Sodium Molybdate, dihydrate 10102-40-6 <0.1 10 mg/m³ as Mo

SECTION III - HAZARD IDENTIFICATION

EXPOSURE LIMITS

OSHA Permissible Exposure Limit (PEL): Not Established

ACGIH Threshold Limit Value (TLV): Not Established

EFFECTS OF OVEREXPOSURE

1. ACUTE: Overexposures can irritate the eyes, skin, mucous membranes and any other exposed tissue.

EYES: Direct contact with product may cause slight to severe irritation.

SKIN: May cause skin irritation, discomfort or rash, unless treated immediately.

INHALATION: Prolonged exposure to low concentrations of vapors may cause headache, sore throat, nausea, dizziness, and even unconsciousness.

INGESTION: May cause nausea, burning sensation in stomach, malaise, gastrointestinal damage. Large doses may cause kidney and liver damage, possibly even death.

2. CHRONIC: Not known.

SECTION IV - FIRST-AID MEASURES

EMERGENCY FIRST AID PROCEDURES

Persons receiving severe exposure to chemicals must be taken to a medical facility for treatment. Supply a copy of label and MSDS of product to health professional.

EYES: Holding eyelids apart, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.

SKIN: Immediately wash affected area with ample soap and water. Carefully remove contaminated clothing. Seek medical attention if irritations occur.

INHALATION: Relocate to fresh air. Seek medical attention if victim's breathing is difficult.

INGESTION: Immediately contact a physician or poison control center for treatment advice. Induce vomiting. Victim should drink large quantities of water or milk. Do not give anything by mouth to someone who is having convulsions, unable to swallow or unconscious.

ADDITIONAL INFORMATION: Note to Physician: Symptomatic treatment.

SECTION V - FIRE AND EXPLOSION DATA

FLASH POINT: N/A; product is non-flammable.

FLAMMABLE LIMITS: LEL: N/A **UEL:** N/A

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EXTINGUISHER MEDIA: Use all means adequate to fight surrounding fire, water, foam, CO₂, dry chemicals, etc.

SPECIAL FIRE FIGHTING PROCEDURES: None specific for this product, however, it is suggested that firefighters wear breathing apparatus and full protective equipment, such as chemical resistant clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes under fire conditions.

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED: In the event of an incidental release or spill, minimum Personal Protective Equipment must be worn: goggles or full face shield, latex or rubber gloves and boots, and long sleeved shirt and pants or coveralls. Contain spill to the smallest area possible and recover liquid into an appropriate container, to salvage for proper disposal. If liquid is absorbed onto dry carrier such as sand or other absorbent material, dispose of as a dry waste in accordance with Federal, State and Local hazardous waste disposal regulations.

SECTION VII - HANDLING AND STORAGE

Personnel should be properly trained in order to handle material safely. Avoid breathing mists or vapors; use in a well-ventilated location, also wear appropriate protective equipment. Containers containing residual should be handled the same as full containers. Do not reuse containers for other purposes.

Inspect all incoming containers for damage before storing. Store in a cool, dry place, away from direct sunlight, sources of intense heat or where freezing is possible. Store it away from living quarters, (food, clothes, feed,ect..). Keep containers tightly closed when not in use. Keep away from reach of children and pets.

SECTION VIII - SPECIAL PROTECTION / CONTROL MEASURES

RESPIRATORY PROTECTION: Wear a NIOSH / OSHA approved respirator if working conditions require doing so.

VENTILATION: Standard ventilation is usually adequate. Exhaust should be used if necessary.

SKIN AND EYE PROTECTION: Safety glasses should be worn when handling chemicals. As a good safety practice, impervious gloves, long sleeved shirt and long pants are recommended.

OTHER CONTROL MEASURES: An eye bath and washing facilities should be readily available. Remove all contaminated clothing.

WORK/HYGIENIC PRACTICES: Wash thoroughly after handling this product.

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: >248°F (>120 °C) **VAPOR PRESSURE (mm/Hg):** Not known

MELTING POINT: N/A **VAPOR DENSITY (air = 1):** Similar to water

SPECIFIC GRAVITY: 1.22 – 1.24 **REACTIVITY IN WATER:** N/A

SOLUBILITY IN WATER: >99% **EVAPORATION RATE** Similar to water

APPEARANCE AND ODOR: Translucent liquid, blue color, with no odor.

OTHER: pH = 9

SECTION X - PHYSICAL HAZARDS (REACTIVITY DATA)

STABILITY: Stable

CONDITIONS TO AVOID: Stable under normal conditions, but avoid extreme heat and contact with incompatible materials.

INCOMPATIBILITY, MATERIALS TO AVOID: Strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes under fire conditions.

SECTION XI - TOXICOLOGICAL INFORMATION

TOXICITY DATA

ORAL LD50: Boric Acid (rat) 2660 mg/kg;

INHALATION TCLO: Sodium Molybdate >2080 mg/m³/4 Hr;

CARCINOGENICITY

No component listed as a carcinogenic by CPDB, IARC, NTP, OSHA, CAL/OSHA and ACGIH.

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MUTAGENICITY: Boric acid, a component of this product, is being investigated as mutagenic.

REPRODUCTIVE TOXICITY: Sodium Molybdate, a component of this product, is being investigated as reproductive effector. The rest of this product components are not reported to have reproductive toxicity effects in animals nor humans.

SECTION XII - ENVIRONMENTAL EFFECTS DATA

All work practices must be aimed at preventing environmental contamination. Any waste due to leakage or spillage should be contained and disposed of accordingly, see above under Accidental Release Measures. Because of its nutritional nature, may cause eutrophication if discharged in bodies of water. The available data on this material does not indicate any undue hazard to the environment under anticipated use and storage. May be toxic to fish due to its copper component.

To aid our customers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section I. If the word "YES" appears next to any category, this product may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Waste disposal must be done following all Federal, State and Local regulations. This product may be disposed at a permitted facility or as advised by your local waste regulatory authority.

SECTION XIV - TRANSPORTATION DATA

DOT Proper Shipping Name and Hazard Class:

Not Regulated by DOT (49CFR 171.4) for packages of less than 361 gallons (1366.5 L). Trade name: SPARKLE

IATA Proper Shipping Name and Hazard Class:

For packages of less than 361 gallons: Not Regulated; trade name: SPARKLE

IMO Proper Shipping Name and Hazard Class:

For packages of less than 361 gallons: Not Regulated; trade name: SPARKLE

Placards / Markings: Not required as per 49CFR172.504(f)(9) for domestic transportation.

Miscellaneous 9 and Marine Pollutant for international transportation.

Emergency Response Guide Number: 171

SECTION XV - REGULATORY INFORMATION

U. S. SARA REPORTING REQUIREMENTS: This product may be subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act:

U.S. SARA 302 (40 CFR 355, Appendix A): NO

U.S. SARA 304 (40 CFR Table 302.4): NO

U.S. SARA 313 (40 CFR 372.65): NO

U.S. SARA THRESHOLD PLANNING QUANTITY: NO

U.S. CERCLA REPORTABLE QUANTITY (RQ): NO

U.S. TSCA INVENTORY STATUS: The anhydrous components of this material are listed on the TSCA Inventory; however, the hydrates are exempted from being listed.

CANADIAN DSL INVENTORY: The components of this material are listed on the DSL Inventory.

If this product contains components designated as CERCLA Reportable Quantity (RQ) Substance, Section 103 of CERCLA requires the "person in charge" of a facility or vessel, as soon as he or she has knowledge of a release of a hazardous substance in an amount equal to or greater than an RQ, to report the release immediately to the National Response Center in Washington, D.C. The NRC number is 1-800-424-8802, or 1 (202) 267-2675.

SECTION XVI - OTHER INFORMATION

NPK INDUSTRIES believes the information contained in this Material Safety Data Sheet is accurate, based on the information supplied by reputable suppliers of our raw materials. However, NPK INDUSTRIES does not guarantee

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their accuracy or completeness. Users should consider these data only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers. . The information contained herein is furnished without warranty of any kind, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for any particular purpose.

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