RESERVE POWER

MATERIAL SAFETY DATA SHEET
Revision 15-Jan-2014

SECTION 1.- COMPANY INFORMATION AND PRODUCT IDENTIFICATION.

Company Name: PLANT POWER PRODUCTS, INC.
Address: 9432 Katy Fwy, Suite 380, Houston, TX 77024 USA
Phone Number for Information: 1 (713) 996-7790

24-Hour Emergency Phone Number, CHEMTREC, CCN652886
In the US and Canada call toll-free 1 (800) 424-9300
From other countries call collect: +1 (703) 527-3887

Chemical Family: Solution of boron and molybdenum
Chemical Name and Synonyms: Liquid fertilizer containing boron and molybdenum, micronutrient solution
Formula: Proprietary
Tradename and Synonyms: **RESERVE POWER; PPP RESERVE POWER 9% B, 0.005% Mo**

SECTION 2.- HAZARDS IDENTIFICATION.

HMIS HAZARD RATINGS
HEALTH HAZARD 1 FIRE HAZARD 0 REACTIVITY 0
Based on the Hazardous Materials Identification System rating
(0 = Minimal; 1 = Slight; 2 = Moderate; 3 = High; 4 = Severe)

POTENTIAL HEALTH EFFECTS
SYMPTOMS OF EXPOSURE:

EYES: Contact with product causes slight to severe eye irritation.
SKIN: May be harmful if absorbed through skin. May cause skin irritation.
INHALATION: Maybe harmful if inhaled, may cause irritation of upper respiratory tract.
INGESTION: May be harmful if swallowed.

SECTION 3.- COMPOSITION / INFORMATION ON INGREDIENTS.

ACTIVE INGREDIENTS:	CAS #	Approx. %	TLV	RTECS #
Boric Acid	10043-35-3	52 – 53	N/E	
Sodium Molybdate, dihydrate	10102-40-6	<1	10 mg/m^3 as Mo	QA5075000

INERT INGREDIENTS:

Blue Dye	519-73-3	<1

SECTION 4.- FIRST-AID MEASURES.

EMERGENCY FIRST AID PROCEDURES
Victims of severe exposure to chemicals must be taken to health providing centers for medical attention. It is advisable to bring with victim a copy of label and MSDS of product to health professional.

IF IN EYES: Holding eyelids apart, flush eyes with copious amounts of clean water for at least 15 minutes. Seek medical attention should severe irritation occurs.

IF ON SKIN: Wash affected area with abundant soap and water. Seek medical attention if irritation occurs.

IF INHALED: Move patient to fresh air. Supplemental oxygen may be indicated. Assure mucous is not obstructing airway. Seek medical attention if victim's breathing is difficult.

IF INGESTED: Immediately contact a physician or poison control center for treatment advice. Induce vomiting. Victim should drink milk, egg whites or large quantities of water. Never give anything by mouth to an unconscious person, or whom is having convulsions or unable to swallow.

ADDITIONAL INFORMATION: Note to physician: Symptomatic treatment.

SECTION 5.- FIREFIGHTING MEASURES.

EXTINGUISHER MEDIA: Use all means adequate to fight surrounding fire: water, foam, CO_2, dry chemicals, etc.

SPECIAL FIRE FIGHTING PROCEDURES: None specific for this product.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes under fire conditions, such as NO, NO_2, CO, CO_2, etc.

SECTION 6.- ACCIDENTAL RELEASE MEASURES.

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
In the event of an incidental release, minimum Personal Protective Equipment must be worn: rubber gloves and boots or of any other impervious material, goggles or full faceshield, and coveralls or long sleeved shirt and pants.
In case of a large spill, protect people by clearing and isolating the affected area. Such releases should be responded to by trained personnel using pre-planned procedures.

ENVIRONMENTAL PRECAUTIONS:
Keep product from entering drains or other waterways in large quantities.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:
It is necessary to contain spill into the smallest area possible by sweeping, scooping, diking, etc., and recover product into an appropriate container, labeling it accordingly for use as intended following original label directions. Should product get contaminated, salvage for proper disposal as waste in accordance with Federal, State and Local waste disposal regulations.

Absorb residual product onto dry carrier such as wood shavings, sand or any other absorbent material, then collect in covered labeled containers and dispose of as a dry waste in accordance with Federal, State and Local waste disposal regulations.

SECTION 7.- HANDLING AND STORAGE.

PRECAUTIONS FOR SAFE HANDLING:
All personnel who handle this material should be trained to work with it safely.
Avoid breathing vapors or mists; use in a well-ventilated location.
Empty containers may contain residual liquid or vapors thus should be handled also with care.

CONDITIONS FOR SAFE STORAGE:
It is recommended to store in a cool place, away from direct sunlight, sources of intense heat or where freezing is possible; if product freezes, let it thaw and use as intended.
Store away from food, feed,clothing materials and living quarters.
Inspect all incoming containers before storage ensuring all are properly labeled and not damaged.
Whenever possible, place hazardous chemicals on secondary containers or containment area.
Keep containers tightly closed when not in use.

SECTION 8.- EXPOSURE CONTROLS / PERSONAL PROTECTION.

CONTROL PARAMETERS / EXPOSURE LIMITS:

OSHA Permissible Exposure Limit (PEL):	Not Established
Threshold Limit Value (TLV):	Not Established

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

VENTILATION: General ventilation is usually adequate. Local exhaust may be used depending on working areas.

SKIN AND EYE PROTECTION: Safety glasses should be worn in any type of operation with chemicals. Protective gloves, long-sleeved shirt and long pants, and protective shoes should be worn as a good safety practice.

OTHER CONTROL MEASURES: An eye bath, safety shower and washing facilities should be readily available. Remove all dirty or contaminated clothing and wash it before wearing it again.

WORK/HYGIENIC PRACTICES: As a general rule, do not eat, drink, smoke, chew gum or tobacco when handling chemicals. Wash thoroughly after handling this product.

SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES.

APPEARANCE AND ODOR: Liquid, translucent, blue color with no perceptible odor.
BOILING POINT: >250 °F (>120 °C)
MELTING POINT: Not applicable
RELATIVE DENSITY: 1.27 – 1.285 g/cm^3
SOLUBILITY IN WATER: Approx. 1000 g/dm^3 @ 20°C
FLASH POINT: Not Applicable; product is non-flammable.
FLAMMABLE LIMITS: **LEL:** Not Applicable **UEL:** Not Applicable
EVAPORATION RATE: No data available
REACTIVITY IN WATER: Not applicable
VAPOR DENSITY (air = 1): Not determined
VAPOR PRESSURE (mm/Hg): Not determined
OTHER: pH 8

SECTION 10.- STABILITY AND REACTIVITY DATA.

CHEMICAL STABILITY: Stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: No data available.

CONDITIONS TO AVOID: Avoid extreme heat, humid areas and contact with incompatible materials.

INCOMPATIBILITY, MATERIALS TO AVOID: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes under fire conditions, such as NO, NO_2, CO, CO_2, etc.

SECTION 11.- TOXICOLOGICAL INFORMATION.

TOXICITY DATA

ORAL LD_{50}: Boric acid (rat) 2660 mg/kg; no information available on the other components
DERMAL LD_{50}: Boric acid (rabbit) >2000 mg/kg; no information available on the other components
INHALATION LC_{50}: Sodium Molybdate >2080 mg/m^3/4 Hr; no information available on other components

RESPIRATORY OR SKIN SENSITISATION: No data available

CARCINOGENICITY: No component is listed as a possible carcinogenic by IARC, OSHA, CAL/OSHA and ACGIH.

MUTAGENICITY: Boric acid, a component of this product is being investigated as a mutagenic agent. The other components are not reported to cause mutagenic effects in animals nor humans.

TERATOGENICITY: The components of this product are not reported to cause teratogenic effects in humans.

REPRODUCTIVE TOXICITY: Boric acid and sodium molybdate are being investigated as possible effectors.

LIKELY ROUTES OF EXPOSURE AND SYMPTOMS:

EYES: Causes eye irritation.
SKIN: May be harmful if absorbed through skin. May cause skin irritation.
INHALATION: Maybe harmful if inhaled, may cause irritation of upper respiratory tract.
INGESTION: May be harmful if swallowed.

SECTION 12.- ECOLOGICAL INFORMATION.

ECOTOXICITY: No environmental impact studies have been performed with this product. All work practices must be aimed at preventing environmental contamination. If discarded as a fertilizer, do not exceed 3 lb of actual boron per acre, it may prove harmful to vegetation.

PERSISTANCE / DEGRADABILITY: The nature of this material does not indicate any undue hazard to the environment under anticipated use and storage.

BIOACCUMULATION / BIOCONCENTRATION: No data available.

MOBILITY / OTHER ADVERSE EFFECTS: Any waste due to spillage or leakage should be contained and disposed of accordingly, see Section 6: Accidental Release Measures. Due of its nutritional nature, may cause eutrophication if discharged in bodies of water.

SECTION 13.- DISPOSAL CONSIDERATIONS.

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

EMPTY CONTAINERS: Empty containers may have residues thus handle them with caution. Dispose of properly according to regulations on empty containers in your locality or make available to a container reconditioning facility for recycling.

SECTION 14.- TRANSPORTATION DATA.

DOT PROPER SHIPPING NAME AND HAZARD CLASS:
Not Regulated by DOT (49CFR 171.4). Trade name: RESERVE POWER

IATA PROPER SHIPPING NAME AND HAZARD CLASS:
Not Regulated. Trade name: RESERVE POWER

IMO PROPER SHIPPING NAME AND HAZARD CLASS:
Not Regulated. Trade name: RESERVE POWER

Placards / Markings: Not Applicable

Emergency Response Guide Number: Not Applicable

SECTION 15.- 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 form of the active components of this material are listed on the TSCA Inventory; however, the hydrate forms are exempted.
CANADIAN DSL INVENTORY: The active component of this material may be listed on the DSL or NDSL 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, DC. The NRC number is 1-800-424-8802 or 1 (202) 267-2675.

SECTION 16.- OTHER INFORMATION.

Date of MSDS Revision: January 15, 2014. Supersedes all previous versions.

Acronyms used in this MSDS:
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAL/OSHA: California Division of Occupational Safety and Health of the Department of Industrial Relations
- CAS: Chemical Abstracts Service
- CERCLA: Comprehensive Environmental Response, Compensation and Liability Act
- CHEMTREC: Chemical Transportation Emergency Center
- CPDB: Carcinogenic Potency Database
- DOT: United States Department of Transportation
- DSL: Canadian Domestic Substances List
- HMIS: Hazardous Materials Identification System
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- IMO: International Maritime Organization
- LC_{50}: Lethal concentration at which 50% of exposed individuals perish
- LD_{50}: Lethal dosage at which 50% of exposed individuals perish
- LEL: Lower Exposure Limit
- NDSL: Canadian Non-Domestic Substances List
- NIOSH: National Institute for Occupational Safety and Health
- NRC: National Response Center
- NTP: National Toxicology Program
- OSHA: Occupational Safety Health Agency
- PEL: Permissible Exposure Limit
- RTECS: Registry of Toxic Effects of Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act
- TLV: Threshold Limit Value
- TSCA: Toxic Substances Control Act
- UEL: Upper Exposure Limit

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