

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: B1 Boost

SYNONYMS: N/A

PRODUCT CODES: 011

MANUFACTURER: SJ ENTERPRISES PTY LTD

DIVISION: N/A

ADDRESS: FACTORY 3&4 / 63 LANGFORD STREET, POORAKA, SOUTH AUSTRALIA

EMERGENCY PHONE: +61 8 8359 8732

CHEMTREC PHONE: N/A

OTHER CALLS: +61 0 430 217 040

FAX PHONE: +61 8 8 359 8732

CHEMICAL NAME: N/A

CHEMICAL FAMILY: N/A

CHEMICAL FORMULA: N/A

PRODUCT USE: Hydroponic Nutrient

PREPARED BY:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Potassium Phosphate Monobasic KH_2PO_4

Potassium Nitrate KNO_3

Thiamine mononitrate $\text{C}_{12}\text{H}_{17}\text{N}_5\text{O}_4\text{S}$

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABL</u>
7778-77-0	0.35%(w/v)		
7757-79-1	0.59 %(w/v)		
532-43-4	0.03%(w/v)		
	<u>ppm</u>	<u>mg/m3</u>	
	0.35×10^6	1.96×10^6	
	0.59×10^6	2.44×10^6	
	0.03×10^6	0.4×10^6	

SHA PEL-TWA: N/A

OSHA PEL STEL : N/A

OSHA PEL CEILING: N/A

ACGIH TLV-TWA: N/A

ACGIH TLV STEL: N/A

ACGIH TLV CEILING: N/A

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Calcium Nitrate on it's own is a strong oxidizer; Due to this product only consisting of 5% of this constituent it is important to note that there is only a very minimal chance of this product causing irritation to the skin, eyes and respiratory tract. This product is harmful though if swallowed or long exposure to inhalation.

ROUTES OF ENTRY:

EYES: May cause irritation, redness and pain.

SKIN: May cause irritation to skin. Symptoms include redness, itching, and pain.

INGESTION: May cause irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

INHALATION: May cause irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

ACUTE HEALTH HAZARDS: No Information found

CHRONIC HEALTH HAZARDS: No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: No Data found

CARCINOGENICITY

OSHA: N/A

ACGIH: N/A

NTP: N/A

IARC: N/A

OTHER: N/A

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

INGESTION: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Refer to MSDS

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/A
(% BY VOLUME) LOWER: N/A

FLASH POINT: N/A

F:

C:

METHOD USED: N/A

AUTOIGNITION TEMPERATURE: N/A

F:

C:

NFPA HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

OTHER: N/A

HMIS HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

PROTECTION:N/A

EXTINGUISHING MEDIA: Use any means suitable for extinguishing surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not combustible, but Calcium Nitrate is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. This can only occur if there is residual in empty containers.

HAZARDOUS DECOMPOSITION PRODUCTS: No data found

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. **Spills:** Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: N/A

VENTILATION : A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

RESPIRATORY PROTECTION: For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

EYE PROTECTION: Safety glasses. Maintain eye wash fountain and quick-drench facilities in work area.

SKIN PROTECTION: Wear protective gloves and clean body-covering clothing.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Please refer to State And Federal regulations

EXPOSURE GUIDELINES: No exposure guidelines have been set for this product.

SECTION 8 NOTES:

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Olive Green

ODOR: Sour Smell

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 5pH

pH (Other):

BOILING POINT:

F: 212

C: 100

MELTING POINT:

F: N/A

C: N/A

FREEZING POINT:

F: 32

C: 0

VAPOR PRESSURE (mmHg):

@

F: N/A

C:

VAPOR DENSITY (AIR = 1): N/A

@

F:

C:

SPECIFIC GRAVITY (H₂O = 1): KH₂PO₄: 0.036 KNO₃: 0.063 Thiamine: 3 x 10⁻³

@ room temperature

F: 77

C: 25

EVAPORATION RATE:

BASIS (=1):

SOLUBILITY IN WATER:

PERCENT SOLIDS BY WEIGHT:

PERCENT VOLATILE:

BY WT/ BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC):

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

WITH WATER: LBS/GAL
WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: KH₂DO₄: 136.9 KNO₃:101 Thiamine: 327.201

VISCOSITY:

@

F:

C:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage

CONDITIONS TO AVOID (STABILITY): (Residual Only)Exposure to heat may result in build-up of dangerous pressures. A strong oxidizer, reacts violently upon contact with many organic substances, particularly textile and paper.

INCOMPATIBILITY (MATERIAL TO AVOID):

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Oxides of nitrogen.

HAZARDOUS POLYMERIZATION: No hazardous polymerization data found.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Calcium Nitrate : Oral rat LD50: 3900 mg/kg. Irritation eye rabbit 500mg/24H severe.

For Potassium Phosphate Monobasic: >4640 mg/kg skin rabbit LD50

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Ecotoxicity:

Calcium Nitrate : The LC50/96-hour values for fish are over 100 mg/l.

Environmental Fate: No Data found

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

RCRA HAZARD CLASS: N/A

SECTION 13 NOTES: Do not use this container for any other purpose. Triple rinse containers, then offer the container for recycling, reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with your local government regulations.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION Not Regulated

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENT:

WATER TRANSPORTATION Not Regulated

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENTS:

AIR TRANSPORTATION Not Regulated

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENTS:

MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 011

Copyright, 2009, SJ Enterprises. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing SJ Enterprises products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from SJ Enterprises, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

NAME OF PRODUCT: B1 Boost

MSDS DATE:14/8/09

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): No Data Found

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): No Data found

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): No Data Found

311/312 HAZARD CATEGORIES: No Data found

313 REPORTABLE INGREDIENTS: No Data found

STATE REGULATIONS: No Data found

INTERNATIONAL REGULATIONS: No Data found

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: Due to the low level of Calcium Nitrate and potassium phosphate found within this product the normal transport & Regulatory product information does not apply.

PREPARATION INFORMATION: N/A

DISCLAIMER:

SJ Enterprises provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

SJ ENTERPRISES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, SJ ENTERPRISES WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.
