

# MATERIAL SAFETY DATA SHEET

SJ Enterprises

FILE NO: 001

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NAME OF PRODUCT: SWELL

MSDS DATE: 14/8/09

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: Swell

SYNONYMS: N/A

PRODUCT CODES: 001

MANUFACTURER: SJ ENTERPRISES PTY LTD

DIVISION: N/A

ADDRESS: FACTORY 3&4 / 63 LANGFORD STREET, POORAKA, SOUTH AUSTRALIA. 5095

EMERGENCY PHONE: +61 8 8359 8732

CHEMTREC PHONE: N/A

OTHER CALLS: +61 0 430 217 040

FAX PHONE: +61 8 8359 8732

CHEMICAL NAME: N/A

CHEMICAL FAMILY: N/A

CHEMICAL FORMULA: N/A

PRODUCT USE: Hydroponic Nutrient

PREPARED BY:

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## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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INGREDIENT: Potassium Nitrate, Potassium Phosphate, Magnesium Nitrate

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
KNO <sub>3</sub> 96193-83-8	.158% (w/v)		
K <sub>3</sub> O <sub>4</sub> P 7778-53-2	1.1% (w/v)		
MgN <sub>2</sub> O <sub>6</sub> 50908-84-4	1.08%(w/v)		
	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	
	.158x 10 <sup>6</sup>	6.51 x 10 <sup>6</sup>	
	1.1 x 10 <sup>6</sup>	9.5 x 10 <sup>6</sup>	
	1.08 x 10 <sup>6</sup>	6.55 x 10 <sup>6</sup>	

OSHA 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

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## SECTION 3: HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW:** This product is heavily diluted with H<sub>2</sub>O and the highest level of constituent found within this product is Potassium Phosphate Monobasic (5%) Due to low levels of the aforementioned constituent large volumes over an extended period of time would be needed to be used to pose potential health affects.

**ROUTES OF ENTRY:** Ingestion

### POTENTIAL HEALTH EFFECTS

**EYES:** May cause irritation, redness and pain.

**SKIN:** Irritant due to its acidic nature. May cause inflammation and pain on prolonged contact, especially with moist skin.

**INGESTION:** Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. Such effects, however, have occurred. Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, cardiac effects and central nervous system effects. The toxicity of phosphates is because of their ability to sequester calcium. Acute potassium intoxication by mouth is rare because large single doses usually induce vomiting and because in the absence of pre-existing kidney damage, potassium is rapidly excreted. Potassium poisoning can result in heart effects, change in respiration rate, tingling in the extremities, heaviness in the limbs, nausea diarrhea.

**INHALATION:** May cause mild irritation to the respiratory tract over an extended period.

**ACUTE HEALTH HAZARDS:** No Information found

**CHRONIC HEALTH HAZARDS:** May sequester calcium and cause calcium phosphate deposits in the kidneys.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Persons with impaired kidney function may be more susceptible to the effects of the substance.

### CARCINOGENICITY

OSHA: N/A

ACGIH: N/A

NTP: N/A

IARC: N/A

OTHER: N/A

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## SECTION 4: FIRST AID MEASURES

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**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.

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**INGESTION:**If swallowed, give several glasses of water to drink to dilute. If large amounts were swallowed or symptoms occur, get medical advice. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. Get medical attention for any breathing difficulty.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Refer to MSDS

## SECTION 5: FIRE-FIGHTING MEASURES

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**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: N/A**

**HAZARDOUS DECOMPOSITION PRODUCTS:** Extreme temperatures will produce carbon and nitrogen oxides.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**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.

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## SECTION 7: HANDLING AND STORAGE

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**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.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**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.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE:** Golden brown

**ODOR:** Sweet smell

**PHYSICAL STATE:** Liquid

**pH AS SUPPLIED:** 3.2 pH

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**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 (H<sub>2</sub>O = 1): KNO<sub>3</sub>: 0.103      K<sub>3</sub>O<sub>4</sub>P: 0.123      MgN<sub>2</sub>O<sub>6</sub>:0.1218**

@

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):**

WITH WATER:      LBS/GAL

WITHOUT WATER:      LBS/GAL

**MOLECULAR WEIGHT: KNO<sub>3</sub> : 101, K<sub>3</sub>O<sub>4</sub>P : 211.9, MgN<sub>2</sub>O : 148.3**

**VISCOSITY:**

@Room Temperature

F:77

C:25

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## SECTION 10: STABILITY AND REACTIVITY

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**STABILITY:** Stable under ordinary conditions of use and storage

**CONDITIONS TO AVOID (STABILITY):** N/A

**INCOMPATIBILITY (MATERIAL TO AVOID):** No incompatibility data found

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** No hazardous decomposition data found.

**HAZARDOUS POLYMERIZATION:** No hazardous polymerization data found.

**CONDITIONS TO AVOID (POLYMERIZATION):** N/A

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## SECTION 11: TOXICOLOGICAL INFORMATION

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

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## SECTION 12: ECOLOGICAL INFORMATION

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**ECOLOGICAL INFORMATION:** Do not contaminate dams, waterways or sewers with this product or the containers, which have held this product.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**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.

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## SECTION 14: TRANSPORT INFORMATION

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### 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:**

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## SECTION 15: REGULATORY INFORMATION

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### 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**

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## SECTION 16: OTHER INFORMATION

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**OTHER INFORMATION: N/A**

**PREPARATION INFORMATION: N/A**

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