

MATERIAL SAFETY DATA SHEET

SECTION 1. Product and Company Identification BEACON PACKET A

Product Name: BEACON PACKET A

Manufacturer Name and Address:

Nuvenco
2518 Midpoint Drive #2
Fort Collins, CO 80525
9704121498

Dates:

Date Created: 03/03/2010

SECTION 2. Composition/Information on Ingredients BEACON PACKET A

Hazardous Components (Chemical Name)	CAS #	Concentration
1. FEED GRADE INGREDIENTS	NA	100.0 %
	OSHA PEL	ACGIH TLV
1.	No data.	No data.

SECTION 3. Hazards Identification BEACON PACKET A

Emergency Overview

No data available.

Route(s) of Entry: Inhalation? No , Skin? No , Eyes? No , Ingestion? No

Potential Health Effects (Acute and Chronic)

No data available.

Carcinogenicity: NTP? N.A. , IARC Monographs? N.A. , OSHA Regulated? N.A.

Carcinogenicity/Other Information

No data available.

Signs and Symptoms Of Exposure

Dust irritation

Medical Conditions Generally Aggravated By Exposure

None known

SECTION 4. First Aid Measures

BEACON PACKET A

Emergency and First Aid Procedures

Flush eyes with water.

Note to Physician

No data available.

SECTION 5. Fire Fighting Measures

BEACON PACKET A

Flash Pt: N.A. **Method Used:** No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: N.A. **Extinguishing Media**

Water

Fire Fighting Instructions

Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

Flammable Properties and Hazards

None known

Hazardous Combustion Products

No data available.

SECTION 6. Accidental Release Measures

BEACON PACKET A

Steps To Be Taken In Case Material Is Released Or Spilled

Salvage if not contaminated.

SECTION 7. Handling and Storage

BEACON PACKET A

Precautions To Be Taken in Handling

No data available.

Precautions To Be Taken in Storing

No data available.

Other Precautions

No data available.

**SECTION 8. Exposure Controls/Personal Protection
BEACON PACKET A**

Respiratory Equipment (Specify Type)

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye Protection

Chemical goggles

Protective Gloves

Rubber or neoprene gloves

Other Protective Clothing

Clothes to prevent skin contact

Engineering Controls (Ventilation etc.)

Good general ventilation should be sufficient to control airborne levels.

Work/Hygienic/Maintenance Practices

Wash hands before eating, smoking, or using restroom.

**SECTION 9. Physical and Chemical Properties
BEACON PACKET A**

Physical States:	<input type="checkbox"/> Gas , <input type="checkbox"/> Liquid , <input checked="" type="checkbox"/> Solid
Boiling Point:	N.A.
Melting Point:	N.A.
Specific Gravity (Water = 1):	N.A.
Density:	No data.
Vapor Pressure (vs. Air or mm Hg):	N.A.
Vapor Density (vs. Air = 1):	N.A.
Evaporation Rate (vs Butyl Acetate=1):	N.A.
Solubility in Water:	N.A. Solubility Notes nil

Percent Volatile: N.A.
Saturated Vapor Concentration: No data.
Viscosity: No data.
pH: No data.
Appearance and Odor
Tan crumbles with slightly sour odor

SECTION 10. Stability and Reactivity BEACON PACKET A

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability
No data available.
Incompatibility - Materials To Avoid
Avoid oxidation as it may affect potency of vitamins.

Hazardous Decomposition Or Byproducts
No data available.
Hazardous Polymerization: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Polymerization
No data available.

SECTION 11. Toxicological Information BEACON PACKET A

No data available.

SECTION 12. Ecological Information BEACON PACKET A

No data available.

SECTION 13. Disposal Considerations BEACON PACKET A

Waste Disposal Method
Dispose of according to local, State, and Federal regulations.

**SECTION 14. Transport Information
BEACON PACKET A**

DOT Proper Shipping Name

No data available.

DOT Hazard Label: None

UN/NA Number: No dat

Additional Transport Information

No data available.

**SECTION 15. Regulatory Information
BEACON PACKET A**

No data available.

**SECTION 16. Other Information
BEACON PACKET A**

Supersedes Revision 04/24/2001

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Material Safety Data Sheet

Beacon Packet B Component A

Revised: 03/06/2010

Printed: 03/06/2010

Section Section 1 - Product Description

Product Name: Beacon Packet B Component A

Size: Various

Distributor: Nuvenco, 2518 Midpoint Drive, Ft. Collins, CO 80525. PH- 9704121498

Section 2 - Composition / Information on Ingredients

Principal Hazardous Components: 100%

TLV units: ACGIH-TLV: 10 mg/m³ TWA

PEL units: OSHA-PEL: 15 mg/m³ TWA(Total dust); 5 mg/m³ TWA (respirable fraction)

Section 3 - Hazard Identification

Emergency Overview: Non-Hazardous under normal use.

Potential Health Effects:

Eyes: May cause irritation. **Skin:** May cause irritation to skin.

Ingestion: May cause gastrointestinal discomfort. **Inhalation:** May cause irritation to respiratory tract.

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical

personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A

NFPA Rating:

Health: 1

Fire: 1

Reactivity: 0

Extinguisher Media: Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: N/A

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Keep container tightly closed in a cool, well-ventilated place. N/A

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: 342.30 **Melting Point:** 185.5°C

Boiling Point: N/A **Vapor Pressure:** N/A

Vapor Density(Air=1): N/A **Specific Gravity (H2O=1):** 1.587 @ 25°C

Percent Volatile by Volume: N/A **Evaporation Rate (BuAc=1):** N/A

Solubility in Water: Soluble **Appearance and Odor:** White, odorless crystals.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: N/A

Incompatibility (Materials to Avoid): Acids,

Hazardous Decomposition Products: COx,

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: orl-rat LD50 29,700 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Conditions Aggravated by Overexposure: N/A

Target Organs: N/A

Primary Route(s) of Entry: Inhalation, ingestion, eye or skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: N/A

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: N/A

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory
Hazard Category for SARA Section 311/312 Reporting: Acute
Name List: Chemical Category:
No No
CERCLA Section 103 RQ(lb.): No

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Material Safety Data Sheet

Beacon Packet B Component B

1. Product Identification

Molecular Weight: 84.01

Product Name: Beacon Packet B Component B

Size: Various

Distributor: Nuvenco, 2518 Midpoint Drive #2, Ft. Collins, CO 80525, 9704121498

2. Composition/Information on Ingredients

Ingredient	Percent	Hazardous
Beacon Packet B Component B	99 - 100%	No

3. Hazards Identification

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

High concentrations of dust may cause coughing and sneezing.

Ingestion:

Extremely large oral doses may cause gastrointestinal disturbances.

Skin Contact:

No adverse effects expected.

Eye Contact:

Contact may cause mild irritation, redness, and pain.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

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

Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact:

Not expected to require first aid measures.

Eye Contact:

Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Small amounts of

residue may be flushed to sewer with plenty of water.

7. Handling and Storage

Keep in a well closed container stored under cold to warm conditions, 2 to 40 C, (36 to 104F). 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.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirators (NIOSH Approved):

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.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White crystalline powder.

Odor:

Odorless.

Solubility:

7.8g/100g water @ 18C (64F).

Density:

2.2

pH:

8.3 (0.1 molar @ 25C (77F))

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

Not applicable.

Melting Point:

60C (140F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Gaseous carbon dioxide.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Reacts with acids to form carbon dioxide. Dangerous reaction with monoammonium phosphate or a sodium-potassium alloy.

Conditions to Avoid:

Heat, moisture, incompatibles.

11. Toxicological Information

Investigated as a mutagen, reproductive effector. Oral rat LD50: 4220 mg/kg. Irritation data: human,skin, 30mg/3D-I mild, rabbit,eye, 100 mg/30 S, mild.

Ingredient Category	-----\Cancer Lists\-----		
	---NTP Carcinogen---		IARC
	Known	Anticipated	
Beacon Packet B Component B	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

48 hour EC50 Daphnia magna (water flea) : 2350 mg/L.

96 hour LC50 Lepomis macrochirus (bluegill) : > 5000 mg/L.

120 hour EC50 Nitzschia linearis (diatom) : 650 mg/L.

This material is not expected to be toxic to aquatic life.

13. Disposal Considerations

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.

14. Transport Information

Not regulated.

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia

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Beacon Packet B Component B	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	--Canada-- NDSL	Phil.

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Beacon Packet B Component B	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
	-SARA 302-			-----SARA 313--

Ingredient	RQ	TPQ	List	Chemical Catg.
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Beacon Packet B Component B	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)

Beacon Packet B Component B

No

No

No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

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