

## MATERIAL SAFETY DATA SHEET

**Manufacturer's Name/Address/Phone:**

Ocean Spray Cranberries, Inc.

One Ocean Spray Drive  
Lakeville-Middleboro, MA 02349  
(508) 946-1000 ext. 3377 or 7131

**Date Prepared/Revised:** 02/04/04

**Product/Substance Description:**

**Cranberry Concentrate Low Haze  
with Essence Returned  
(a food ingredient)**

**CAS No:** (Mixture-not applicable)

**MSDS Prepared by:** J. North

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### SECTION I - HAZARDOUS INGREDIENTS

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(Hazardous components by chemical/common name, %, OSHA PEL, ACGIH TLV, Other Limits)

- \*\* **Quinic Acid;** (CAS 77-95-2); 7-8%; PEL/TLV: Not Established
- \*\*\* **Citric Acid;** (CAS 77-92-9); 7-8%; PEL/TLV: Not Established
- \*\*\*\* **Malic Acid;** (CAS 6915-15-7); 5-6%; PEL/TLV: Not Established

- \*\* 1,3,4,5-tetrahydroxycyclohexanecarboxylic acid
- \*\*\* 2-hydroxy-1,2,3-Propanetricarboxylic acid
- \*\*\*\* Hydroxybutanedioic acid

(Note: This mixture contains approximately 56% water.)

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### SECTION II - PHYSICAL DATA

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**Appearance & Odor:** Dark red viscous liquid with cranberry aroma.

**pH:** 2.31

**Vapor Pressure:** 760mm Hg or 1 atm at 225°F

**Boiling Point:** 225°F

**Specific Gravity:** 1.234 g/ml

**Solubility in Water:** Totally soluble in water.

**Melting Point:** N/A

**Water Reactive:** Not water reactive.

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### **SECTION III - FIRE AND EXPLOSION DATA**

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**Flash Point/Method:** >200EF, Tag Closed Cup **Upper/Lower Explosive Limits:** Not determined  
(ASTM D-56)

**OSHA Flammability Category:** Non-flammable, non-combustible liquid.

**Extinguishing Media:** Dry chemical, alcohol foam, carbon dioxide, Halon.

**Special Fire-Fighting Procedures:** None.

**Unusual Fire & Explosion Hazards:** None.

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### **SECTION IV - HEALTH HAZARD DATA**

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**Effects of Overexposure:** (This mixture has not been tested as a whole. However, it contains ingredients which individually pose the health hazards described below.)

**Inhalation:** Mixture not expected to pose an inhalation hazard under foreseeable conditions of use.

**Ingestion:** This highly concentrated and acidic food ingredient is for manufacturing use only and should not be directly ingested. Irritation of gastrointestinal tract will occur if intake is excessive. Frequent intake can erode teeth.

**Eye Contact:** Will cause eye irritation.

**Skin Contact:** Prolonged or repeated contact will cause irritation.

**Emergency and First Aid:**

**Eyes:** Flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.

**Skin:** Wash with soap and water. Get medical attention in the event of skin reaction or persistent irritation.

**Ingestion:** Drink two or three glasses of water or milk. Do not induce vomiting unless instructed by medical personnel.

Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air in the event of respiratory discomfort.

**Medical Conditions Aggravated by Exposure:** Skin or eye disease.

Carcinogen Listed in NTP: ; \_\_\_ IARC Monograph: \_\_\_; OSHA: \_\_\_; Not Listed: X

**Additional Comments Re: Health Hazards:** None.

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## **SECTION V - SPECIAL PERSONAL PROTECTIVE MEASURES**

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**Respiratory Protection/Special Ventilation Requirements:** No special requirements are normally needed.

**Skin Protection:** Acid resistant gloves and appropriate protective clothing should be worn to prevent skin contact.

**Eye Protection:** Splash proof safety glasses should be worn.

**Other Special Protection/Work Practices:** Store away from oxidizing materials.

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## **SECTION VI - STORAGE, HANDLING, DISPOSAL**

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**Precautions Re: Handling & Storage:** Store in lined drums in a cool place away from fire hazards, heat or strong oxidizers in keeping with applicable fire safety codes.

**Disposal Methods:** Dispose of in accordance with applicable local, state, or federal law and regulations. This material would not be a hazardous waste under US EPA hazardous waste (RCRA) regulations.

**Steps to take Re: Spills or Leaks:** Cover spill with inert absorbent materials. Place into closed container for proper disposal. Wash spill area with detergent and water.

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## **SECTION VII - REACTIVITY DATA**

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**Stability:** Stable under normal temperatures and pressures.

**Incompatibility (Material to avoid):** Strong oxidizing agents.

**Hazardous Decomposition Products:** Thermal decomposition may produce carbon dioxide, carbon monoxide, acrid smoke, and fumes.

**Hazardous Polymerization:** Will not occur.

*The information contained herein is based on data considered accurate. However, no warranty of any kind is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.*

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