



MATERIAL SAFETY DATA SHEET
APPLE, RED DELICIOUS IN ETHANOL, NATURAL

Preparation Date 09/01/06

HMIS HAZARD RATING:

Health: 2 Flammability: 3 Reactivity: 1

I. PRODUCT IDENTIFICATION

| | | | |
|---------------|---------------------------------|----------------|-------------------------------------|
| Product Name: | Apple, Red Delicious in Ethanol | Chemical Name: | Flavorant (Primarily Ethyl Alcohol) |
| Product Code: | 7000914 | CAS# | 64-17-5 |
| Formula: | C ₂ H ₆ O | Molecular Wt. | N.Ap. |

II. HAZARDOUS INGREDIENTS

Ethanol: FLAMMABLE--Keep away from sparking tools and open flame

III. PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|--------------------------|------------------------|--|--------|
| Boiling Point °C: | 78° | Specific Gravity (H ₂ O = 1): | 0.8193 |
| Vapor Pressure (mm Hg): | N.Ap. | Melting Point: | N.Ap. |
| Vapor Density (AIR = 1): | > 1.0 | Evaporation Rate: | N.Av. |
| Solubility in Water: | Soluble | | |
| Appearance: | Clear colorless liquid | Odor: | Apple |

IV. FIRE AND EXPLOSION HAZARD DATA

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|-------------------------------------|--|
| Flashpoint (Method Used) | 63 °F (CC) |
| Lower Flammable Limit (% by Volume) | N.Ap. |
| Upper Flammable Limit (% by Volume) | N.Ap. |
| Extinguishing Media | Dry chemical, foam or water |
| Special Fire Fighting Procedures | Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. |
| Unusual Fire and Explosion Hazards | None. |

V. REACTIVITY DATA

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|---|---|----------------------------|
| Stability | Chemically Stable | Conditions to Avoid: N.Ap. |
| Incompatibility with other Substance (Materials to Avoid) | Avoid contact with strong oxidizing agents. | |
| Hazardous Decomposition or Byproducts | N.Av. | |
| Hazardous Polymerization | No | Conditions to Avoid: N.Ap. |

VI. HEALTH HAZARD DATA

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|------------------------------------|--|
| Routes of Entry | Inhalation? [X] Skin Contact? [X] Skin Absorption? [X] Ingestion? [X] |
| Health Hazards (Acute and Chronic) | Acute: Irritating to skin and eyes. Chronic: None reported. |
| Carcinogenicity | NTP? [No] IARC Monographs? [No] OSHA Regulated? [No] |

Technology Improving Taste



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VII. EMERGENCY AND FIRST AID PROCEDURES

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|--------------|--|
| Inhalation | Remove from the exposure to fresh air. Contact a physician as necessary. If breathing is irregular or has stopped, start resuscitation and administer oxygen if available. |
| Eye Contact | Flush immediately with clean water for at least 15 minutes. Contact a physician if irritation persists. |
| Skin Contact | Remove any contaminated clothing or shoes. Wash affected areas thoroughly with soap and water. If irritation persists, contact a physician. |
| Ingestion | Give water to dilute. Contact a physician immediately. |

VIII. PRECAUTIONS FOR SAFE HANDLING AND USE

| | |
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| Steps to be taken in case material is released or spilled. | Eliminate all ignition sources. Ventilate area. Contain spill and recover free product. Report spill to appropriate authorities if required. |
| Waste Disposal Method | Place material into sealed containers and dispose of in accordance with current applicable laws and regulations. |
| Precautions to be taken in handling and storing. | Avoid inhalation and contact with skin and eyes. Good personal hygiene practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. Contaminated clothing and shoes should be cleaned before re-use. Good manufacturing practices dictate that an eyewash fountain and/or safety shower should be available in the work area. |
| Other Precautions: | None. |

IX. CONTROL MEASURES

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| Respiratory Protection: | None generally required. If desired use NIOSH approved respirator. |
| Ventilation: | Local exhaust meeting ACGIH criteria as needed. |
| Protective Gloves: | Use chemical resistant gloves. |
| Protective Eyewear: | Use splash goggles or face shield when eye contact might occur. |
| Other Protective Clothing or Equipment: | None required. |

X. EMERGENCY CONTACT INFORMATION

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|--|-----------------|
| Emergency Contact Name: | INFOTRAC |
| Contact Number (inside US and Canada): | (800) 535-5053 |
| Contact Number (collect outside of US and Canada): | (352) 323-3500 |

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