

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

## Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1 Product Code:** 00135  
**Product Name:** Cranberry Flavor  
**Trade Name:** Cranberry Flavor
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- 1.3 Details of the Supplier of the Safety Data Sheet:**  
**Company Name:** Perfumer's Apprentice  
170 Technology Circle  
Scotts Valley, CA 95066
- 1.4 Emergency telephone number:**

## Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:**
- 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:**  
Acute Toxicity: Oral, Category 4  
Acute Toxicity: Inhalation, Category 4  
Aquatic Toxicity (Chronic), Category 2  
Skin Corrosion/Irritation, Category 1A  
Serious Eye Damage/Eye Irritation, Category 1  
Target Organ Systemic Toxicity (single exposure), Category 3  
Acute Toxicity: Skin, Category 4  
Flammable Liquids, Category 3
- 2.1.2 Classification according to Directive 1999/45/EC:**  
Xn: Harmful  
Ha  
rm  
fu  
I  
C: Corrosive  
Risk Phrases: R10, R20/21/22, R36/37/38, R34, R35  
For full text of R- phrases: see SECTION 15.
- 2.2 Label Elements:**
- 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:**



**GHS Signal Word:** Danger

**GHS Hazard Phrases:**

- H302 - Harmful if swallowed.
- H332 - Harmful if inhaled.
- H411 - Toxic to aquatic life with long lasting effects.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H335 - May cause respiratory irritation.
- H312 - Harmful in contact with skin.
- H226 - Flammable liquid and vapor.

**GHS Precaution Phrases:**

- P264 - Wash hands thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
- P273 - Avoid release to the environment.
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P233 - Keep container tightly closed.
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.
- P243 - Take precautionary measures against static discharge.
- P242 - Use only non-sparking tools.

**GHS Response Phrases:**

- P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 - Rinse mouth.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 - Call a POISON CENTER/doctor/... if you feel unwell.
- P391 - Collect spillage.
- P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- P363 - Wash contaminated clothing before reuse.
- P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P310 - Immediately call a POISON CENTER/doctor/....
- P321 - Specific treatment see ... on this label.
- P302+352 - IF ON SKIN: Wash with plenty of soap and water.
- P322 - Specific measures see ... on this label.
- P370+378 - In case of fire, use ... to extinguish.

**GHS Storage and Disposal Phrases:**

- P501 - Dispose of contents/container to ....
- P405 - Store locked up.
- P403+233 - Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.
- P403+235 - Store in cool/well-ventilated place.

**2.2.2 Labeling according to Directive 1999/45/EC:**



**Xn**

**Ha**

**rm**

**fu**

**I**



**C**

<b>2.3 Adverse Human Health Effects and Symptoms:</b>	<p>Chronic exposure to acetic acid may cause erosion of dental enamel, bronchitis, eye irritation, darkening of the skin, and chronic inflammation of the respiratory tract.</p> <p>Prolonged or repeated skin contact may cause dermatitis. Skin sensitization to acetic acid is rare, but has occurred.</p> <p>Chronic: Acetic acid can cause occupational asthma. One case of a delayed asthmatic response to glacial acetic acid has been reported in a person with bronchial asthma.</p>
<b>2.3.1 Inhalation:</b>	<p>The toxicological properties of this substance have not been fully investigated. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest. Causes respiratory tract irritation. Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted. May be harmful if inhaled. Skin: May be harmful if absorbed through skin. May cause skin irritation. Material is irritating to mucous membranes and upper respiratory tract. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Effects may be delayed. Causes chemical burns to the respiratory tract. Exposure may lead to bronchitis, pharyngitis, and dental erosion. May be absorbed through the lungs.</p>
<b>2.3.2 Skin Contact:</b>	<p>May cause cyanosis of the extremities. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. Causes redness and pain. Contact with the skin may cause a local anesthetic effect. Material is a weak skin sensitizer. In an acute dermal irritation study in rats, two of six animals exhibited liver damage. Prolonged and/or repeated contact may cause irritation and/or dermatitis. Causes skin irritation. May cause skin irritation. The toxicological properties of this material have not been fully investigated. Skin Absorption: May be harmful if absorbed through the skin. Causes burns. Skin Absorption: Skin absorption may occur. Harmful if absorbed through the skin. Causes skin burns. Contact with the skin may cause blackening and hyperkeratosis of the skin of the hands.</p>
<b>2.3.3 Eye Contact:</b>	<p>May cause chemical conjunctivitis and corneal damage. Causes severe eye irritation. Causes redness and pain. The toxicological properties of this material have not been fully investigated. Causes burns. Contact with liquid or vapor causes severe burns and possible irreversible eye damage.</p>
<b>2.3.4 Ingestion:</b>	<p>The toxicological properties of this substance have not been fully investigated. Ingestion of large amounts may cause central nervous system depression. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. Harmful if swallowed. May cause severe and permanent damage to the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause polyuria, oliguria (excretion of a diminished amount of urine in relation to the fluid intake) and anuria (complete suppression of urination). Rapidly absorbed from the gastrointestinal tract.</p>

**Section 3. Composition/Information on Ingredients**

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	Risk Phrases/ GHS Classification
7452-79-1	Ethyl 2 - methylbutyrate	>=10.0 %	231-225-4 NA	R10
16409-45-3	Menthyl acetate	>=10.0 %	240-459-6 NA	N; R51/53
100-51-6	Benzenemethanol	1.0 -10.0 %	202-859-9 603-057-00-5	Xn; R20/22 Acute Tox.(O) 4: H302 Acute Tox.(I) 4: H332
100-52-7	Benzaldehyde	1.0 -10.0 %	202-860-4	Xn; R22

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120-51-4	Benzoic acid, Phenylmethyl ester	1.0 -10.0 %	605-012-00-5 204-402-9 607-085-00-9	Acute Tox.(O) 4: H302 Xn; R22 Acute Tox.(O) 4: H302 Aquatic (C) 2: H411
7492-70-8	Butyl O - butyryllactate	1.0 -10.0 %	231-326-3 NA	No phrases apply. Skin Corr. 2: H315 Eye Damage 2A: H319 TOST (SE) 3: H335 H336
1490-04-6	Cyclohexanol, 5-Methyl-2-(1-methylethyl)-	1.0 -10.0 %	216-074-4 NA	Xi; R36/37/38
98-55-5	.alpha.-Terpineol	1.0 -10.0 %	202-680-6 NA	Xi; R38
116-53-0	Butanoic acid, 2-methyl-	1.0 -10.0 %	204-145-2 NA	No phrases apply. Acute Tox.(O) 4: H302 Acute Tox.(D) 4: H312 Skin Corr. 1C: H314 Eye Damage 1: H318
64-19-7	Acetic acid	1.0 -10.0 %	200-580-7 607-002-00-6	C;Xi; R10-35 Flam. Liq. 3: H226 Skin Corr. 1A: H314
64-17-5	Ethyl alcohol	1.0 -10.0 %	200-578-6 603-002-00-5	F; R11 Flam. Liq. 2: H225

### Section 4. First Aid Measures

#### 4.1 Description of First Aid Measures:

**In Case of Inhalation:** Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. If breathed in, move person into fresh air. Consult a physician. If inhaled, remove to fresh air.

**In Case of Skin Contact:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Wash off with soap and plenty of water. Consult a physician. In case of contact, immediately wash skin with soap and copious amounts of water. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician. Get medical aid immediately.

**In Case of Eye Contact:** Get medical aid. Get medical aid immediately. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

**In Case of Ingestion:** Get medical aid. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. If swallowed, wash out mouth with water provided person is conscious. Call a physician. Get medical aid immediately. If victim is fully conscious, give a cupful of water.

#### 4.2 Important Symptoms and Effects, Both Acute and Delayed:

Central nervous system depression, Prolonged or repeated exposure to skin causes defatting and dermatitis. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Exposure can cause: Nausea, dizziness, and headache. Inhalation may result in spasm, inflammation and edema of the larynx and

bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

**Note for the Doctor:** Treat symptomatically and supportively. Blood benzyl alcohol and benzoic acid and urine hippuric acid may be helpful in diagnosis. Consult a physician. Show this safety data sheet to the doctor in attendance. Treat symptomatically. Move out of dangerous area. Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance.

## Section 5. Fire Fighting Measures

**5.1 Suitable Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Use dry chemical, carbon dioxide, or alcohol-resistant foam. Water spray may cause frothing. Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out. Use water fog, dry chemical, carbon dioxide, or regular foam. Suitable: Water spray. For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective.

**5.2 Flammable Properties and Hazards:**

**Flash Pt:**

**Explosive Limits:**

LEL:

UEL:

**Autoignition Pt:**

**5.3 Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Wear self contained breathing apparatus for fire fighting if necessary.

Further information.

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air. They can spread along the ground and collect in low or confined areas. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air.

## Section 6. Accidental Release Measures

- 6.3 Methods and Material For Containment and Cleaning Up:** Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Personal precautions.
- Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- Environmental precautions.  
Do not let product enter drains.  
Methods for cleaning up.  
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.
- PROCEDURE(S) OF PERSONAL PRECAUTION(S)**  
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete. **PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.** Evacuate area. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.  
Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Wash area with soap and water. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form nonflammable mixtures. Control runoff and isolate discharged material for proper disposal. Spill may be carefully neutralized with soda ash (sodium carbonate).

## Section 7. Handling and Storage

- 7.1 Precautions To Be Taken in Handling:** Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Remove contaminated clothing and wash before reuse. Keep away from heat and flame. Avoid breathing dust, mist, or vapor. Avoid inhalation of vapor or mist.
- Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Avoid contact with skin and eyes. Do not ingest or inhale. Avoid contact with skin and eyes. Normal measures for preventive fire protection. Use only in a well-ventilated area. User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Do not get in eyes, on skin, or on clothing. Discard contaminated shoes. Use only with adequate ventilation. Do not breathe dust, mist, or vapor. Use corrosion-resistant transfer equipment when dispensing.
- 7.2 Precautions To Be Taken in Storing:** Keep away from heat, sparks and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store in cool place. Store under nitrogen. Keep container closed when not in use. Suitable: Keep from contact with oxidizing materials. Do not store near alkaline substances. Acetic acid should be kept above its freezing point of 62°F(17°C) to allow it to be handled as a liquid. It will contract slightly on freezing.

Freezing and thawing does not affect product quality.

## Section 8. Exposure Controls/Personal Protection

### 8.1 Exposure Parameters:

CAS #	Partial Chemical Name	Britain EH40	France VL	Europe
7452-79-1	Ethyl 2 - methylbutyrate			
16409-45-3	Menthyl acetate			
100-51-6	Benzenemethanol			
100-52-7	Benzaldehyde			
120-51-4	Benzoic acid, Phenylmethyl ester			
7492-70-8	Butyl O - butyryllactate			
1490-04-6	Cyclohexanol, 5-Methyl-2-(1-methylethyl)-			
98-55-5	.alpha.-Terpineol			
116-53-0	Butanoic acid, 2-methyl-			
64-19-7	Acetic acid		STEL: 25 mg/m3 (10 ppm)	TWA: 25 mg/m3
64-17-5	Ethyl alcohol	TWA: 1920 mg/m3 (1000 ppm) STEL: ()	TWA: 1900 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (5000 ppm)	

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7452-79-1	Ethyl 2 - methylbutyrate			
16409-45-3	Menthyl acetate			
100-51-6	Benzenemethanol			
100-52-7	Benzaldehyde			
120-51-4	Benzoic acid, Phenylmethyl ester			
7492-70-8	Butyl O - butyryllactate			
1490-04-6	Cyclohexanol, 5-Methyl-2-(1-methylethyl)-			
98-55-5	.alpha.-Terpineol			
116-53-0	Butanoic acid, 2-methyl-			
64-19-7	Acetic acid	PEL: 10 ppm	TLV: 10 ppm STEL: 15 ppm	
64-17-5	Ethyl alcohol	PEL: 1000 ppm	TLV: 1000 ppm	

### 8.2 Exposure Controls:

**8.2.1 Engineering Controls (Ventilation etc.):** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels. Use adequate ventilation to keep airborne concentrations low. Mechanical exhaust required. Safety shower and eye bath. Use only in a chemical fume hood. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use a corrosion-resistant ventilation system.

### 8.2.2 Personal protection equipment:

**Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Wear chemical splash goggles. Safety glasses. Safety glasses with side-shields

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Printed: 03/28/2014

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	conforming to EN166. Chemical safety goggles. Other: Faceshield (8-inch minimum). Wear chemical splash goggles and face shield.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to prevent skin exposure. Handle with gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
<b>Respiratory Equipment (Specify Type):</b>	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand: Compatible chemical-resistant gloves.
<b>Work/Hygienic/Maintenance Practices:</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes.

## Section 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

<b>Physical States:</b>	<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid
<b>Appearance and Odor:</b>	Transparent Colorless. Cranberry taste and aroma.		
<b>Melting Point:</b>			
<b>Boiling Point:</b>			
<b>Flash Pt:</b>			
<b>Evaporation Rate:</b>			
<b>Explosive Limits:</b>	LEL:		UEL:
<b>Vapor Pressure (vs. Air or mm Hg):</b>			
<b>Vapor Density (vs. Air = 1):</b>			
<b>Specific Gravity (Water = 1):</b>			
<b>Solubility in Water:</b>			
<b>Autoignition Pt:</b>			



**9.2 Other Information**

Percent Volatile:

**Section 10. Stability and Reactivity**

**10.1 Reactivity:**

**10.2 Stability:** Unstable [ ] Stable [ X ]

**10.3 Conditions To Avoid - Hazardous Reactions:**

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**10.4 Conditions To Avoid - Instability:** Incompatible materials, ignition sources, Excess heat, Air Exposure to moisture. Light, Heat, Strong oxidants, No data available. freezing temperatures, confined spaces, Note: Use great caution in mixing with water due to heat evolution that causes explosive spattering. Always add the acid to water.

**10.5 Incompatibility - Materials To Avoid:** Strong bases, Strong oxidizing agents, Strong acids, hydrogen bromide gas, iron at 100C(exothermic polymerization), Corrosive to iron, Steel, Strong reducing agents, Alkali metals, Aluminum, iron, phenols, Oxygen. acids, and bases. Strong oxidizing agents. Bases, Metals. chlorine trifluoride, Nitric acid, acetaldehyde, chlorosulfonic acid, oleum, bromine pentafluoride, Perchloric acid, potassium tert-butoxide, ethyleneimine, 2-aminoethanol, ethylene diamine, phosphorus trichloride, phosphorus isocyanate.

**10.6 Hazardous Decomposition Or Byproducts:** Carbon monoxide, irritating and toxic fumes and gases, Carbon dioxide, Hazardous decomposition products formed under fire conditions.

Carbon oxides, formed under fire conditions.

**Section 11. Toxicological Information**

**11.1 Information on Toxicological Effects:** Epidemiology: No information found. Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity: No information available. Other Studies: Acute toxicity. No data available. Inhalation: Respiratory or skin sensitization: Germ cell mutagenicity. Reproductive toxicity - no data available. Specific target organ toxicity -single exposure (Globally Harmonized System) May cause respiratory irritation.

Specific target organ toxicity -repeated exposure (Globally Harmonized System) Aspiration hazard. Teratogenicity: No data available.

**Irritation or Corrosion:** Skin - rabbit -

**Carcinogenicity/Other Information:** CAS# 7452-79-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 100-51-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 120-51-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Carcinogenicity. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 1490-04-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 64-19-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

**Section 12. Ecological Information**

- 12.1 Toxicity:** Environmental: If released to soil, benzyl alcohol is expected to display high mobility and readily leach through soil. Volatilization from dry soil to the atmosphere may be an important fate process; however, it is not expected to be an important process in moist soils. If released to water, benzyl alcohol is expected to undergo microbial degradation under aerobic and anaerobic conditions.  
Physical: In the atmosphere, benzyl alcohol is expected to exist almost entirely in the vapor phase. The estimated half-life for the vapor phase reaction of benzyl alcohol with photochemically produced hydroxyl radicals is 2 days.  
Ecotoxicity: Evaporation from dry surfaces is likely to occur. When spilled on soil, the liquid will spread on the surface and penetrate into the soil at a rate dependent on the soil type and its water content. Acetic acid shows no potential for biological accumulation or food chain contamination.  
If released to the atmosphere, it is degraded in the vapor-phase by reaction with photochemically produced hydroxyl radicals (estimated typical half-life of 26.7 days). It occurs in atmospheric particulate matter in acetate form and physical removal from air can occur via wet and dry deposition.  
Physical: Natural waters will neutralize dilute solutions to acetate salts.  
Other: No information available.
- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** No data available.

**Section 13. Disposal Considerations**

- 13.1 Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed. Product.  
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.  
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging. Dispose of as unused product. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## Section 14. Transport Information

### 14.1 LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Benzaldehyde. mixture.

**DOT Hazard Class:** 9 CLASS 9

**UN/NA Number:** UN1990 **Packing Group:** III

### 14.1 LAND TRANSPORT (Canadian TDG):

**TDG Shipping Name:** No information available. Not Regulated. ACETIC ACID, GLACIAL.

### 14.1 LAND TRANSPORT (European ADR/RID):

**ADR/RID Shipping Name:**

**UN Number:** 1990

**Packing Group:** III

**Hazard Class:** 9 - CLASS 9

### 14.3 AIR TRANSPORT (ICAO/IATA):

**ICAO/IATA Shipping Name:** Benzaldehyde. mixture.

## Section 15. Regulatory Information

### European Community Hazard Symbol codes:

### European Community Risk and Safety Phrases:

R10	Flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R34	Causes burns.
R35	Causes severe burns.
S16	Keep away from sources of ignition.
S33	Take precautionary measures against static discharges.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)
S9	Keep container in a well-ventilated place.
S28A	After contact with skin, wash immediately with plenty of water.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S24/25	Avoid contact with skin and eyes.
S25	Avoid contact with eyes.
S36	Wear suitable protective clothing.
S23	Do not breathe vapour.

**Section 16. Other Information**

**Revision Date:** 03/28/2014

**Additional Information About  
This Product:**