

SECTION 1: PRODUCT IDENTIFICATION

| | |
|------------------------|--|
| PRODUCT NAME | APPLE (Flavor) |
| PRODUCT CODE | 1999 |
| SUPPLIER | MEDISCA Inc. Tel.: 1.800.932.1039 Fax.: 1.855.850.5855 661 Route 3, Unit C, Plattsburgh, NY, 12901 3955 W. Mesa Vista Ave., Unit A-10, Las Vegas, NV, 89118 6641 N. Belt Line Road, Suite 130, Irving, TX, 75063 MEDISCA Pharmaceutique Inc. Tel.: 1.800.665.6334 Fax.: 514.338.1693 4509 Rue Dobrin, St. Laurent, QC, H4R 2L8 21300 Gordon Way, Unit 153/158, Richmond, BC V6W 1M2 MEDISCA Australia PTY LTD Tel.: 1.300.786.392 Fax.: 61.2.9700.9047 Unit 7, Heritage Business Park 5-9 Ricketty Street, Mascot, NSW 2020 |
| EMERGENCY PHONE | CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 NSW Poisons Information Centre: 131 126 |
| USES | Flavouring agent |

SECTION 2: HAZARDS IDENTIFICATION

| | | | | | | | | | |
|-----------------------------------|---|----------------------------|---|---------------------|---|-------------------|---|----------------------------|---|
| GHS CLASSIFICATION | Flammable Liquid (Category 4) | | | | | | | | |
| PICTOGRAM | Not Applicable | | | | | | | | |
| SIGNAL WORD | Warning | | | | | | | | |
| HAZARD STATEMENT(S) | Combustible liquid. | | | | | | | | |
| AUSTRALIA-ONLY HAZARDS | Repeated exposure may cause skin dryness or cracking. | | | | | | | | |
| PRECAUTIONARY STATEMENT(S) | Prevention Keep away from heat, sparks, open flames and/or hot surfaces - No smoking. Wear protective gloves, eye protection and face protection. Response IN CASE OF FIRE: Use dry chemical, CO ₂ , alcohol resistant foam or water to extinguish. Storage Store in a well-ventilated place. Keep cool. Disposal Dispose of contents and container in accordance with local regulations. | | | | | | | | |
| HMIS CLASSIFICATION | <table><tr><td>Health Hazard</td><td>1</td><td>Flammability</td><td>2</td></tr><tr><td>Reactivity</td><td>0</td><td>Personal Protection</td><td>F</td></tr></table> | Health Hazard | 1 | Flammability | 2 | Reactivity | 0 | Personal Protection | F |
| Health Hazard | 1 | Flammability | 2 | | | | | | |
| Reactivity | 0 | Personal Protection | F | | | | | | |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|-------------------------|----------------|
| CHEMICAL NAME | Not applicable |
| BOTANICAL NAME | Not applicable |
| SYNONYM | Not applicable |
| CHEMICAL FORMULA | Not applicable |
| CAS NUMBER | Not applicable |

ALTERNATE CAS NUMBER Not applicable

MOLECULAR WEIGHT Not applicable

COMPOSITION

| CHEMICAL NAME | CAS NUMBER | % BY WEIGHT |
|---------------|------------|-------------|
| ACETALDEHYDE | 75-07-0 | 0.1-1.0 |
| ETHYL ALCOHOL | 64-17-5 | 0.1-1.0 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.

NOTES

INGREDIENT LISTING: PROPYLENE GLYCOL, ARTIFICIAL FLAVOR.

SECTION 4: FIRST-AID MEASURES

IN CASE OF EYE CONTACT

Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.

IN CASE OF SKIN CONTACT

Wash with soap & water for 15 minutes. If irritation persists seek medical aid.

IF SWALLOWED

Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.

IF INHALED

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician

SYMPTOMS AND EFFECTS

Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 5: FIREFIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Not applicable.

FLAMMABLE PROPERTIES

Combustible.

HAZARDOUS COMBUSTION PRODUCTS

Under fire conditions, hazardous fumes will be present.

EXTINGUISHING MEDIA

Small fire: dry chemical, CO₂ or water spray. **Large fire:** dry chemical, CO₂, alcohol resistant foam or water spray. Do not get water inside containers.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

METHODS & MATERIAL FOR CONTAINMENT

On land, sweep or shovel into suitable containers.

CLEANUP PROCEDURE

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.

STORAGE CONDITIONS

Store in original container, tightly sealed, protected from direct sunlight and moisture. Preserve in tight containers, away from heat and sources of ignition.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION
Chemical Name: ACETALDEHYDE CAS #: 75-07-0

| | TWA | Ceiling | STEL | REL | IDLH | Remarks |
|--------------------------|--------------------------------|---------|------------------------------|-----|------|---------|
| OSHA PEL | 200 ppm; 360 mg/m ³ | N/L | - | - | - | - |
| ACGIH TLV | N/L | 25 ppm | N/L | - | - | - |
| NIOSH | 200 ppm; 360 mg/m ³ | N/L | N/L | N/L | N/L | - |
| AIHA WEEL | N/L | N/L | N/L | - | - | - |
| Safe Work Australia HSIS | 20 ppm; 36 mg/m ³ | N/L | 50 ppm; 91 mg/m ³ | - | - | - |
| HSE | 20 ppm; 37 mg/m ³ | N/L | 50 ppm; 92 mg/m ³ | - | - | - |

Chemical Name: ETHYL ALCOHOL CAS #: 64-17-5

| | TWA | Ceiling | STEL | REL | IDLH | Remarks |
|--------------------------|----------------------------------|---------|------|----------------------------------|--------------------------------|---------|
| OSHA PEL | 1000 ppm; 1900 mg/m ³ | N/L | - | - | - | - |
| ACGIH TLV | N/L | N/L | N/L | - | - | - |
| NIOSH | 1000 ppm; 1900 mg/m ³ | N/L | N/L | 1000 ppm; 1900 mg/m ³ | 3300 ppm (10% LEL) (see 64175) | - |
| AIHA WEEL | N/L | N/L | N/L | - | - | - |
| Safe Work Australia HSIS | 1000 ppm; 1880 mg/m ³ | N/L | N/L | - | - | - |
| HSE | 1000 ppm; 1920 mg/m ³ | N/L | N/L | - | - | - |

N/L = Not Listed

EXPOSURE GUIDELINES

Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m³

PERSONAL PROTECTIVE EQUIPMENT

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. **Skin:** Wear appropriate gloves to prevent skin exposure. **Clothing:** Wear appropriate protective clothing to minimize contact with skin. **Respirators:** Follow WHMIS or 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.

SPECIFIC ENGINEERING CONTROLS

Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | | | | | |
|---|--|---|---------------|------------------------------|----------------|
| PHYSICAL STATE | Liquid | | | | |
| DESCRIPTION | Clear, colourless to pale yellow liquid, with a characteristic odor. | | | | |
| SOLUBILITY | Soluble in water. | | | | |
| ODOR | Characteristic odor | | | | |
| FLAMMABILITY | Combustible | | | | |
| ODOR THRESHOLD | Not available | pH | Not available | MELTING POINT | Not available |
| BOILING POINT | 36°C, 96.8°F | FREEZING POINT | Not available | FLASH POINT | 77 °C, 170.6°F |
| SPECIFIC GRAVITY | 0.9794 - 1.0794 (25°C) | EVAPORATION RATE | Not available | EXPLOSIVE LIMIT | Not available |
| UPPER FLAMMABLE/EXPLOSIVE LIMIT(S) | Not available | LOWER FLAMMABLE/EXPLOSIVE LIMIT(S) | Not available | VAPOR PRESSURE | Not available |
| VAPOR DENSITY (AIR = 1) | Not available | RELATIVE DENSITY (WATER = 1) | Not available | log P (OCTANOL-WATER) | Not available |
| AUTO-IGNITION TEMPERATURE | Not available | DECOMPOSITION TEMPERATURE | Not available | VISCOSITY | Not available |

NOTES The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

| | |
|--|--|
| REACTIVITY | Not established. |
| STABILITY | Stable under recommended storage conditions. |
| MATERIALS TO AVOID | Strong oxidants. |
| HAZARDOUS DECOMPOSITION PRODUCTS | Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur. |
| HAZARDOUS POLYMERIZATION | Will not occur. |
| POSSIBILITY OF HAZARDOUS REACTION | Not established. |
| CONDITIONS TO AVOID | Moisture, sunlight and extreme temperatures. |

SECTION 11: TOXICOLOGICAL INFORMATION

YOUR TRUSTED PARTNER IN COMPOUNDING

ACUTE TOXICITY

ACETALDEHYDE

Oral: Rat: LD50: (mg/kg): 660
 Dermal: Rabbit: LD50: (mg/kg): Not available
 Inhalation: Rat: LC50: (mg /L/4hr): 13 300

ETHYL ALCOHOL

Oral: Rat: LD50: (mg/kg): 7060
 Dermal: Rabbit: LD50: (mg/kg): 20 000
 Inhalation: Rat: LC50: (mg /L/4hr): 31 623

SKIN CORROSION/IRRITATION

Contains ETHYL ALCOHOL: Irritant. Based on available data, the classification criteria are not met.

SERIOUS EYE DAMAGE/EYE IRRITATION

Contains ETHYL ALCOHOL: Irritant. Based on available data, the classification criteria are not met.

RESPIRATORY OR SKIN SENSITIZATION

Due to lack of data the classification is not possible.

GERM CELL MUTAGENICITY

Due to lack of data the classification is not possible.

CARCINOGENICITY

OSHA

ACETALDEHYDE is listed.
 ETHANOL is listed.
 Based on the compositional information available from the supplier, no other component of this product is listed.

NTP

ACETALDEHYDE is reasonably anticipated to be a human carcinogen.
 ETHANOL is listed.
 Based on the compositional information available from the supplier, no other component of this product is listed.

IARC

ACETALDEHYDE is listed in group 2b (possibly carcinogenic to humans).
 ETHANOL is listed in group 1 (carcinogenic to humans).
 Based on the compositional information available from the supplier, no other component of this product is listed.

California Proposition 65

This product contains the following chemical known to the State of California to cause cancer: ACETALDEHYDE.
 This product contains the following chemical known to the State of California to cause cancer and birth defects or other reproductive harm: ETHYL ALCOHOL.
 Based on the compositional information available from the supplier, no other component of this product is listed.

ADDITIONAL CARCINOGENICITY INFORMATION

Due to lack of data the classification is not possible.

REPRODUCTIVE TOXICITY

Contains ETHYL ALCOHOL: Reproductive hazard.
 Based on available data, the classification criteria are not met.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Due to lack of data the classification is not possible.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

Due to lack of data the classification is not possible.

ASPIRATION HAZARDS

Due to lack of data the classification is not possible.

SIGNS AND SYMPTOMS OF EXPOSURE

Not expected to present a significant hazard under anticipated conditions of normal use.

POTENTIAL HEALTH EFFECTS

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed in large quantities.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

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|--------------------------------------|--|
| TOXICITY | EC50: 48 Hr: Crustacea: (mg/L): Not available LC50: 96 Hr: Fish: (mg/L): Not available EC50: 72 or 96Hr: Algae (or other aqua plants): (mg/L): Not available |
| PERSISTENCE AND DEGRADABILITY | Not available |
| BIOACCUMULATIVE POTENTIAL | Not available |
| MOBILITY IN SOIL | Soluble in water. |
| OTHER ADVERSE EFFECTS | Not available This product is not intended to be released into the environment. |

SECTION 13: DISPOSAL CONSIDERATIONS

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|-----------------------|---|
| WASTE DISPOSAL | Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment. |
|-----------------------|---|

SECTION 14: TRANSPORT INFORMATION

UNITED STATES & CANADA

| | |
|--------------------------------|--------------------|
| UN PROPER SHIPPING NAME | Not dangerous good |
| UN NUMBER | Not applicable |
| CLASS | Not applicable |
| PACKING GROUP | Not applicable |

AUSTRALIA

| | |
|--------------------------------|--------------------|
| UN PROPER SHIPPING NAME | Not dangerous good |
| UN NUMBER | Not applicable |
| CLASS | Not applicable |
| PACKING GROUP | Not applicable |
| HAZCHEM | Not applicable |

| | |
|-------------------------------------|----------------|
| ENVIRONMENTAL HAZARDS | Not available |
| SPECIAL SHIPPING INFORMATION | Not applicable |

SECTION 15: REGULATORY INFORMATION

| Chemical Name & CAS | CERCLA 40 CFR Part 302.4 | SARA (Title III) 40 CFR Part 372.65 | EPA 40 CFR Part 355 | | Pennsylvania | Right-to-know | | California Prop 65 |
|-----------------------|--------------------------------|---|---------------------|------------|--------------|---------------|---------------|-----------------------|
| | | | Appendix A | Appendix B | | New Jersey | Massachusetts | |
| ACETALDEHYDE 75-07-0 | X | X | N/L | N/L | X | X | X | X |
| ETHYL ALCOHOL 64-17-5 | N/L | N/L | N/L | N/L | X | X | X | N/L |

N/L = Not Listed; X = Listed

AUSTRALIAN REGULATIONS

| Chemical Name & CAS | Poisons and Therapeutic Goods Regulation | Therapeutic Goods Act | Code of Practices - Illicit Drug Precursors |
|-----------------------|--|-----------------------|---|
| ACETALDEHYDE 75-07-0 | N/L | N/L | Listed as Category II |
| ETHYL ALCOHOL 64-17-5 | N/L | N/L | N/L |

SECTION 16: OTHER INFORMATION

REFERENCES

Available upon request

ABBREVIATIONS AND ACRONYMS

CAS – Chemical Abstract Service; **GHS** – Global Harmonized System; **OSHA PEL** – Occupational Safety & Health Administration Permissible Exposure Limits; **TWA** – Time Weighted Average; **HSIS** – Hazardous Substances Information System; **STEL** – Short Term Exposure Limit; **AIHA WEEL** – American Industrial Hygiene Association Workplace Environment Exposure Levels; **LD50** – Lethal Dose, 50%; **IARC** – International Agency for Research on Cancer; **NTP** – National Toxicology Program; **WHMIS** – Workplace Hazardous Materials Information System; **SARA** – Superfund Amendments and Reauthorization Act; **EPA** – Environmental Protection Agency; **CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act; **HMIS** – Hazardous Materials Information System; **NIOSH** – National Institute for Occupational Safety and Health; **MSHA** – Mine Safety and Health Administration; **ACGIH** – American Conference of Governmental Industrial Hygienists; **IDHL** – Immediately Dangerous to Health or Life; **TLV** – Threshold Limit Value; **HSE** – Health and Safety Executive; **REL** – Recommended Exposure Limit

LAST REVISION

06/2018

SUPERSEDES

09/2015

DISCLAIMER

This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEDISCA® shall not be held liable for any damage resulting from handling or from contact with the above product. Recipients of the product must take responsibility for observing existing laws and regulations.