


SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME	STRAWBERRY FLAVOR (Liquid) (FlavoRx)
PRODUCT CODE	2984
SUPPLIER	MEDISCA Inc. Tel.: 1.800.932.1039 Fax.: 1.855.850.5855 661 Route 3, Unit C, Plattsburgh, NY, 12901 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 National Chemical Emergency Centre 44(0)1235239670
RECOMMENDED USES	Manufacturing and Compounding
RESTRICTIONS ON USE	Not applicable

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION	Flammable Liquid (Category 4)	
PICTOGRAM		
SIGNAL WORD	Warning	
HAZARD STATEMENT(S)	Combustible liquid. Exposure may produce an allergic reaction. Causes skin, eye and respiratory tract irritation. May be harmful if inhaled Repeated exposure may cause skin dryness or cracking.	
ADVERSE PHYSIOCHEMICAL, HUMAN HEALTH AND ENVIRONMENTAL EFFECTS		
PRECAUTIONARY STATEMENT(S)	Prevention	Keep away from heat, sparks, open flames and other ignition sources. - No smoking. Wear protective gloves, protective clothing, eye and face protection. Avoid breathing dust, fume, gas, mist, vapors, and spray. In case of inadequate ventilation wear respiratory protection.

Response IN CASE OF FIRE: Use dry chemical, CO₂, alcohol resistant foam or water spray to extinguish.
IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms call a poison center or medical professional.

Storage Store in a well-ventilated place.
Keep cool.

Disposal Dispose of contents and/or container in accordance with local regulations.

HMIS CLASSIFICATION

Health Hazard	2	Flammability	2
Reactivity	0	Personal Protection	E

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME Not applicable
BOTANICAL NAME Not applicable
SYNONYM Not applicable
CHEMICAL FORMULA Not applicable
CHEMICAL FAMILY Not applicable
CAS NUMBER Not applicable
ALTERNATE CAS NUMBER Not applicable
MOLECULAR WEIGHT Not applicable

COMPOSITION

CHEMICAL NAME	CAS NUMBER	EC NUMBER	% BY WEIGHT
ACETYL BUTYRYL (2,3-Hexanedione)	3848-24-6	223-350-8	proprietary*
ACETYL PROPIONYL (2,3 pentadione)	600-14-6	209-984-8	proprietary*
DIACETYL	431-03-8	207-069-8	proprietary*
ETHYL 3-PHENYLGLYCIDATE	121-39-1	204-467-3	< 2
ETHYL MALTOL	4940-11-8	225-582-5	2 - 5
ETHYL METHYLPHENYLGLYCIDATE	77-83-8	201-061-8	proprietary*
GAMMA-UNDECALACTONE	104-67-6	203-225-4	< 2
PROPYLENE GLYCOL	57-55-6	200-338-0	> 75
VANILLIN	121-33-5	204-465-2	2 - 5

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

As per the supplier, all flavor ingredients contained in this product are approved for use in a regulation of the FDA or are listed as being generally recognized as safe on the FEMA GRAS list.

*Flavoring components are considered trade secret. Therefore the chemical names, exact compositional breakdown, or other chemical identification of the specific compounds of flavor ingredients are withheld in accordance with 1910.1200 of the Code of Federal regulations.

This product contains: Propylene Glycol and Natural & 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
MEDICAL ATTENTION AND SPECIAL TREATMENT	Get emergency medical help.
SYMPTOMS CAUSED BY EXPOSURE	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 liquid
HAZARDOUS COMBUSTION PRODUCTS	Under fire conditions, hazardous fumes will be present.
SUITABLE & UNSUITABLE EXTINGUISHING MEDIA	Small fire: dry chemical, CO ₂ or water spray. Large fire: dry chemical, CO ₂ , 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.
REFERENCE TO OTHER SECTIONS	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

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 unlabeled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.
CONDITIONS FOR SAFE STORAGE	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 unlabeled 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.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION
Chemical Name: ACETYL BUTYRYL (2,3-Hexanedione) CAS #: 3848-24-6

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

Chemical Name: ACETYL PROPIONYL (2,3 pentadione) CAS #: 600-14-6

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Germany-AGS	0.02(1)	0.083(1)	0.02(1)(2)	0.083(1)(2)	N/L	N/L	N/A	(1) Skin (2) 15 minutes average value
GESTIS	Germany-DFG	0.02(1)	0.083(1)	0.02(1)(2)	0.083(1)(2)	N/L	N/L	N/A	(1) Skin (2) 15 minutes average value
GESTIS	Switzerland	0.02	0.08	0.04(1)	0.16(1)	N/L	N/L	N/A	(1) 15 minutes average value

Chemical Name: DIACETYL CAS #: 431-03-8

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	0.01(1)	N/L	0.02(2)	N/L	N/L	N/L	N/A	(1) 8hr (2)15mins
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Austria	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Belgium	0.01	0.04	0.02(1)	0.07(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Denmark	0.02	0.07	0.02(1)	0.14(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	European Union	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/	(1) 15 minutes average value; Indicative Occupational Exposure Limit Value (IOELV)
GESTIS	Finland	0.02	0.07	0.10(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	France	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value; Indicative statutory limit values
GESTIS	Germany-AGS	0.02(1)	0.071(1)	0.02(1)(2)	0.071(1)(2)	N/L	N/L	N/A	(1) Skin (2) 15 minutes average value
GESTIS	Germany-DFG	0.02(1)	0.071(1)	0.02(1)(2)	0.071(1)(2)	N/L	N/L	N/A	(1) Skin (2) 15 minutes average value
GESTIS	Ireland	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Italy	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Latvia	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Norway	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Poland	N/L	0.07	N/L	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Romania	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Spain	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Sweden	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value
GESTIS	Switzerland	0.02	0.07	0.1(1)	0.36(1)	N/L	N/L	N/A	(1) 15 minutes average value

Chemical Name: ETHYL 3-PHENYLGLYCIDATE CAS #: 121-39-1

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

Chemical Name: ETHYL MALTOL CAS #: 4940-11-8

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

Chemical Name: ETHYL METHYLPHENYLGLYCIDATE CAS #: 77-83-8

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

Chemical Name: GAMMA-UNDECALACTONE CAS #: 104-67-6

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

Chemical Name: PROPYLENE GLYCOL CAS #: 57-55-6

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	10	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	10	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Canada-Ontario	N/L	10(1)	N/L	N/L	N/L	N/L	N/A	(1) For assessing the visibility in a work environment where 1,2-propylene glycol aerosol is present.
GESTIS	Ireland	N/L	10	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Latvia	N/L	7	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Poland	25	100(1)	N/L	N/L	N/L	N/L	N/A	(1) Inhalable fraction
GESTIS	South Africa Mining	N/L	10	N/L	N/L	N/L	N/L	N/A	N/A

Chemical Name: VANILLIN CAS #: 121-33-5

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

N/L = Not listed ; N/A = Not Available

PELs are 8-hour TWAs = Limit value - Eight hours

Ceiling or Short-Term TWA = STEL = Limit value - Short term

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. Thermal Hazards: For products representing a thermal hazard, appropriate Personal Protective Equipment should be used.
SPECIFIC ENGINEERING CONTROLS	Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.
BIOLOGICAL MONITORING	Not available
CONTROL BANDING	Not available
NOTES	DIACETYL "Popcorn workers' lung" is an obstructive pulmonary disease produced by inhalation of volatile artificial butter flavorings. In rats, inhalation of diacetyl, a major component of butter flavoring, and inhalation of a diacetyl substitute, 2,3-PENTANEDIONE (Acetyl propionyl), produce similar damage to airway epithelium. Acetyl butyryl is also a diacetyl substitute. In 2010, Toxicology Excellence for Risk Assessment (TERA) proposed an occupational exposure limit for DIACETYL of 0.2 ppm/8 hr TWA. In its draft criteria document issued in 2011, NIOSH recommended exposure limits for DIACETYL and 2, 3-PENTANEDIONE of 5 ppb/8 hr TWA and 9.3 ppb/8 hr TWA, respectively. NIOSH also recommended short term exposure limits of 25 ppb/15 min for DIACETYL and 31 ppb/15 min for 2,3-PENTANEDIONE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid				
DESCRIPTION	Colorless to pale yellow liquid with characteristic odor.				
SOLUBILITY	Soluble in water.				
ODOR	Characteristic odor				
FLAMMABILITY	Combustible liquid				
AUTO-IGNITION TEMPERATURE	Not available	BOILING POINT	Not available	DECOMPOSITION TEMPERATURE	Not available
EVAPORATION RATE	Not available	EXPLOSIVE LIMIT	Not available	FLASH POINT	66 °C, 150.8 °F
log P (OCTANOL-WATER)	Not available	LOWER FLAMMABLE/EXPLOSIVE LIMIT(S)	2.6 (v/v) %	MELTING/FREEZING POINT	Not available
PARTICLE CHARACTERISTICS	Not available	OXIDIZING PROPERTY	Not available	pH	Not available
RELATIVE DENSITY (WATER = 1)	Not available	SPECIFIC GRAVITY	1.0190 - 1.0590 (25°C)	UPPER FLAMMABLE/EXPLOSIVE LIMIT(S)	12.6 (v/v) %
VAPOR DENSITY (AIR = 1)	Not available	VAPOR PRESSURE	0.1 hPa (20°C)	VISCOSITY	Not available

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

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	Not established
CHEMICAL STABILITY	Stable under recommended storage conditions
INCOMPATIBLE MATERIALS	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. Heat and sources of ignition

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	Oral: Rat: LD50: (mg/kg): Not available Dermal: Rabbit: LD50: (mg/kg): Not available Inhalation: Rat: LC50: (mg/L/4hr): Not available
SKIN CORROSION/IRRITATION	Due to lack of data the classification is not possible.
SERIOUS EYE DAMAGE/EYE IRRITATION	Due to lack of data the classification is not possible.
RESPIRATORY SENSITIZATION	Exposure may produce an allergic reaction.
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	<p>OSHA Based on the compositional information available from the supplier, no component of this product is listed.</p> <p>NTP Based on the compositional information available from the supplier, no component of this product is listed.</p> <p>IARC Based on the compositional information available from the supplier, no component of this product is listed.</p> <p>California Proposition 65 Based on the compositional information available from the supplier, no component of this product is listed.</p>
ADDITIONAL CARCINOGENICITY INFORMATION	Due to lack of data the classification is not possible.
REPRODUCTIVE TOXICITY	Due to lack of data the classification is not possible.
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
ROUTES OF EXPOSURE:

Oral, Dermal, Inhalation, Eye contact

EARLY ONSET SYMPTOMS RELATED TO EXPOSURE:

Not available

DELAYED HEALTH EFFECT FROM EXPOSURE:

Not available

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

POTENTIAL HEALTH EFFECTS

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation. May cause an allergic reaction.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.

SECTION 12: ECOLOGICAL INFORMATION
ECOTOXICITY

EC50: 48 Hr: Crustacea: (mg/L): Not available

LC50: 96 Hr: Fish: (mg/L): Not available

EC50: 72 or 96 Hr: 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
DISPOSAL METHODS

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

SECTION 14: TRANSPORT INFORMATION
UN PROPER SHIPPING NAME

Not dangerous good

UN NUMBER

Not applicable

CLASS

Not applicable

PACKING GROUP

Not applicable

AUSTRALIA
HAZCHEM

Not applicable

EU
TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not Listed

ENVIRONMENTAL HAZARDS

Not available

SPECIAL SHIPPING INFORMATION

Not applicable

SECTION 15: REGULATORY INFORMATION
UNITED STATES REGULATIONS

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	
ACETYL BUTYRYL 3848-24-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L
DIACETYL 431-03-8	N/L	N/L	N/L	N/L	X	X	X	N/L
VANILLIN 121-33-5	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL MALTOL 4940-11-8	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL METHYLPHENYLGLYCIDATE 77-83-8	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL 3-PHENYLGLYCIDATE 121-39-1	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L
PROPYLENE GLYCOL 57-55-6	N/L	N/L	N/L	N/L	X	X	N/L	N/L
GAMMA-UNDECALACTONE 104-67-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ACETYL PROPIONYL 600-14-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed; X = Listed

AUSTRALIAN REGULATIONS

Chemical Name & CAS	Poisons and Therapeutic Goods	Therapeutic Goods Act	Code of Practices - Illicit Drug Precursors	Poisons Standard	Work Health and Safety Regulations	Inventory of Industrial Chemicals
ACETYL BUTYRYL 3848-24-6	N/L	N/L	N/L	N/L	N/L	N/L
DIACETYL 431-03-8	N/L	N/L	N/L	N/L	N/L	N/L
VANILLIN 121-33-5	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL MALTOL 4940-11-8	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL METHYLPHENYLGLYCIDATE 77-83-8	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL 3-PHENYLGLYCIDATE 121-39-1	N/L	N/L	N/L	N/L	N/L	N/L
PROPYLENE GLYCOL 57-55-6	N/L	N/L	N/L	N/L	N/L	N/L
GAMMA-UNDECALACTONE 104-67-6	N/L	N/L	N/L	N/L	N/L	N/L
ACETYL PROPIONYL 600-14-6	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed

EU REGULATIONS

Chemical Name & CAS	REACH ANNEX XVII	REACH ANNEX XIV	EC 1005/2009	EC 850/2004	EC 1107/2009	PIC - Prior Informed Consent Regulation	EC 2012/18
ACETYL BUTYRYL 3848-24-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L
DIACETYL 431-03-8	N/L	N/L	N/L	N/L	N/L	N/L	N/L
VANILLIN 121-33-5	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL MALTOL 4940-11-8	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL METHYLPHENYLGLYCIDATE 77-83-8	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ETHYL 3-PHENYLGLYCIDATE 121-39-1	N/L	N/L	N/L	N/L	N/L	N/L	N/L
PROPYLENE GLYCOL 57-55-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L
GAMMA-UNDECALACTONE 104-67-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L
ACETYL PROPIONYL 600-14-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed; X = Listed

Any EU regulation not listed above is not applicable to this product.

SUBJECT TO INTERNATIONAL AGREEMENT Not applicable

SECTION 16: OTHER INFORMATION

REFERENCES

Available upon request

ABBREVIATIONS AND ACRONYMS

ACGIH - American Conference of Governmental Industrial Hygienists; **AIHA WEEL** – American Industrial Hygiene Association Workplace Environment Exposure Levels; **CAESAR** – Computer Assisted Evaluation of industrial chemical Substances According to Regulations; **CAS** – Chemical Abstract Service; **CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act; **EC50** – Effective Concentration, 50%; **EPA** – Environmental Protection Agency; **GHS** – Global Harmonized System; **HMIS** – Hazardous Materials Information System; **HSE** – Health and Safety Executive; **HSIS** – Hazardous Substances Information System; **IARC** – International Agency for Research on Cancer; **IDLH** - Immediately Dangerous to Life or Health; **IRFMN** – Ready Biodegradability Model; **ISS** – Istituto Superiore Sanità; **LC50** – Lethal Concentration, 50%; **LD50** – Lethal Dose, 50%; **MSHA** - Mine Safety and Health Administration; **NIOSH** – National Institute for Occupational Safety and Health; **NTP** – National Toxicology Program; **OSHA PEL** – Occupational Safety & Health Administration Permissible Exposure Limits; **QSAR** – Quantitative Structure-activity relationship; **REL** – Recommended Exposure Limit; **SARA** – Superfund Amendments and Reauthorization Act; **STEL** – Short Term Exposure Limit; **TLV** – Threshold Limit Value; **TWA** – Time Weighted Average; **WHMIS** – Workplace Hazardous Materials Information System

LAST REVISION

06/2023

SUPERSEDES

12/2021

For a list of changes to the SDS since the last version, please communicate with MEDISCA at www.medisca.com

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.

SUPPLEMENTARY INFORMATION

For all country specific requirements not outlined on this Safety Data Sheet, please request Supplementary Page to this Safety Data Sheet.