Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier
3M™ Deodorizer - Country Day Scent - Concentrate (Product No. 12, Twist 'n Fill™ System)

Product Identification Numbers

ID Number	UPC	ID Number	UPC
61-0000-6335-6		61-0000-6376-0	
70-0708-4012-2	00-48011-20119-6	70-0710-0972-7	00-48011-23895-6
70-0716-8287-9	00-48011-20119-6	70-0716-8295-2	00-48011-23895-6

7000002089, 7000029703, 7100049083, 7010342454, 7010295258

1.2. Recommended use and restrictions on use

Recommended use
Deodorizer

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Commercial Branding and Transportation Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification
Acute Toxicity (oral): Category 4.
Serious Eye Damage/Irritation: Category 1.
Skin Corrosion/Irritation: Category 2.
Skin Sensitizer: Category 1.
Reproductive Toxicity: Category 2.

2.2. Label elements

Signal word
Danger

Symbols
Corrosion | Exclamation mark | Health Hazard |

Pictograms

Hazard Statements
Harmful if swallowed.
Causes serious eye damage.
Causes skin irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.

Precautionary Statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
Immediately call a POISON CENTER or doctor/physician.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Rinse mouth.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:
Store locked up.

Disposal:
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

10% of the mixture consists of ingredients of unknown acute oral toxicity.
10% of the mixture consists of ingredients of unknown acute dermal toxicity.
17% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
C8-10 Alcohols Ethoxylated Propoxylated	68603-25-8	35 - 45 Trade Secret *

FRAGRANCE (NJTSRN 004499600-6516)	Trade Secret*	< 30 Trade Secret *
Polysorbate 20	9005-64-5	13 - 20 Trade Secret *
Water	7732-18-5	15 - 20 Trade Secret *
Methoxyisopropanol	107-98-2	4 - 5 Trade Secret *
2,6-Dimethyl-7-Octen-2-ol	18479-58-8	< 3 Trade Secret *
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	32388-55-9	< 2 Trade Secret *
Alpha-Isomethyl Ionone	127-51-5	< 2 Trade Secret *
Diethyl Phthalate	84-66-2	< 2 Trade Secret *
Hexamethylindanopyran	1222-05-5	< 2 Trade Secret *
Linalool	78-70-6	< 2 Trade Secret *
Linalyl Acetate	115-95-7	< 2 Trade Secret *
Methyldihydrojasmonate	24851-98-7	< 2 Trade Secret *
Terpenes and terpenoids, sweet orange-oil	68647-72-3	< 2 Trade Secret *
Turpentine	8006-64-2	< 2 Trade Secret *
Citral	5392-40-5	< 0.5 Trade Secret *
Geraniol	106-24-1	< 0.5 Trade Secret *
GERANYL ACETATE	105-87-3	< 0.5 Trade Secret *
p-Mentha-1,4-Diene	99-85-4	< 0.3 Trade Secret *
Terpineol	98-55-5	< 0.3 Trade Secret *
Acid Red 52	3520-42-1	< 0.05 Trade Secret *
Acid Violet 12	6625-46-3	< 0.05 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:
Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:
Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

4.3. Indication of any immediate medical attention and special treatment required
Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters
No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
This product is not intended to be used without prior dilution as specified on the product label. Grounding or safety shoes with electrostatic dissipating soles (ESD) are not required with a chemical dispensing system. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities
Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Methoxyisopropanol	107-98-2	ACGIH	TWA:50 ppm;STEL:100 ppm	A4: Not class. as human carcin
Citral	5392-40-5	ACGIH	TWA(inhalable fraction and vapor):5 ppm	A4: Not class. as human carcin, SKIN; Dermal sensitizer
Turpentine	8006-64-2	ACGIH	TWA:20 ppm	A4: Not class. as human carcin, Dermal Sensitizer
Turpentine	8006-64-2	OSHA	TWA:560 mg/m3(100 ppm)	
Diethyl Phthalate	84-66-2	ACGIH	TWA:5 mg/m3	A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
NOTE: When used with a chemical dispensing system as directed, special ventilation is not required. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

NOTE: When used with a chemical dispensing system as directed, eye contact with the concentrate is not expected to occur. The following protection(s) are recommended if the product is not used with a chemical dispensing system or if there is an accidental release, wear protective eye/face protection. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Full Face Shield
Indirect Vented Goggles

Skin/hand protection
NOTE: When used with a chemical dispensing system as directed, skin contact with the concentrate is not expected to occur. If product is not used with a chemical dispensing system or if there is an accidental release:

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary.

If product is not used with a chemical dispensing system or if there is an accidental release:
Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended:
Apron - polymer laminate

Respiratory protection

NOTE: When used with a chemical dispensing system as directed, respiratory protection is not required.
If product is not used with a chemical dispensing system or if there is an accidental release:
An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	Dark Red
Specific Physical Form:	Liquid
Odor	Strong Floral
Odor threshold	*No Data Available*
pH	6.5 - 8.5
Melting point	*Not Applicable*
Boiling Point	Approximately > 212 ºF
Flash Point	No flash point
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Vapor Pressure	<=27 psia [@ 131 ºF]
Vapor Density	*No Data Available*
Density	*No Data Available*
Specific Gravity	1 [*Ref Std:*WATER=1]
Solubility in Water	Complete
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*No Data Available*
Viscosity	90.67 centipoise
Volatile Organic Compounds	10 - 15 % weight [*Test Method:*calculated per CARB title 2]
VOC Less H2O & Exempt Solvents	150 - 200 g/l [*Test Method:*calculated per CARB title 2]

SECTION 10: Stability and reactivity

10.1. Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:
No health effects are expected.

Skin Contact:
May be harmful in contact with skin.
Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:
Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:
Harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >2,000 - =5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >300 - =2,000 mg/kg
C8-10 Alcohols Ethoxylated Propoxylated	Dermal	Rabbit	LD50 >= 1,680 mg/kg
C8-10 Alcohols Ethoxylated Propoxylated	Ingestion	Rat	LD50 >= 810 mg/kg
Polysorbate 20	Ingestion	Hamster	LD50 18,000 mg/kg
Polysorbate 20	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Polysorbate 20	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.1 mg/l
Methoxyisopropanol	Dermal	Rabbit	LD50 11,000-13,800 mg/kg
Methoxyisopropanol	Inhalation-Vapor (4 hours)	Rat	LC50 56 mg/l
Methoxyisopropanol	Ingestion	Rat	LD50 6,100 mg/kg
2,6-Dimethyl-7-Octen-2-ol	Dermal	Rabbit	LD50 > 5,000 mg/kg
2,6-Dimethyl-7-Octen-2-ol	Ingestion	Rat	LD50 3,020 mg/kg
Turpentine	Dermal	Rabbit	LD50 > 2,000 mg/kg
Turpentine	Inhalation-Vapor (4 hours)	Rat	LC50 13.7 mg/l
Turpentine	Ingestion	Rat	LD50 3,956 mg/kg
Linalool	Dermal	Rabbit	LD50 5,610 mg/kg
Linalool	Ingestion	Rat	LD50 2,790 mg/kg
Terpenes and terpenoids, sweet orange-oil	Inhalation-Vapor (4 hours)	Mouse	LC50 > 3.14 mg/l
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Dermal	Rabbit	LD50 > 5,000 mg/kg
Alpha-Isomethyl Ionone	Dermal	Rabbit	LD50 > 5,000 mg/kg
Linalyl Acetate	Dermal	Rabbit	LD50 5,610 mg/kg
Methyldihydrojasmonate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Terpenes and terpenoids, sweet orange-oil	Dermal	Rabbit	LD50 > 5,000 mg/kg
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Ingestion	Rat	LD50 4,500 mg/kg
Alpha-Isomethyl Ionone	Ingestion	Rat	LD50 > 5,000 mg/kg
Hexamethylindanopyran	Dermal	Rat	LD50 > 2,000 mg/kg
Hexamethylindanopyran	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.04 mg/l
Hexamethylindanopyran	Ingestion	Rat	LD50 > 2,000 mg/kg
Linalyl Acetate	Ingestion	Rat	LD50 > 9,000 mg/kg
Methyldihydrojasmonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.93 mg/l
Methyldihydrojasmonate	Ingestion	Rat	LD50 > 10,000 mg/kg
Terpenes and terpenoids, sweet orange-oil	Ingestion	Rat	LD50 4,400 mg/kg
Diethyl Phthalate	Dermal	Rat	LD50 11,200 mg/kg
Diethyl Phthalate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.9 mg/l
Diethyl Phthalate	Ingestion	Rat	LD50 8,200 mg/kg
Citral	Dermal	Rabbit	LD50 2,250 mg/kg
Geraniol	Dermal	Rabbit	LD50 > 5,000 mg/kg
Citral	Ingestion	Rat	LD50 6,800 mg/kg
Geraniol	Ingestion	Rat	LD50 3,600 mg/kg
GERANYL ACETATE	Ingestion	Rat	LD50 6,330 mg/kg
GERANYL ACETATE	Dermal	similar	LD50 > 5,460 mg/kg

		compoun ds	
Terpineol	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
Terpineol	Ingestion	similar compoun ds	LD50 > 2,000 mg/kg
p-Mentha-1,4-Diene	Dermal	Rat	LD50 > 2,000 mg/kg
p-Mentha-1,4-Diene	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
C8-10 Alcohols Ethoxylated Propoxylated	Rabbit	Irritant
Polysorbate 20	Rabbit	Minimal irritation
Methoxyisopropanol	Not available	Minimal irritation
2,6-Dimethyl-7-Octen-2-ol	In vitro data	Irritant
Turpentine	In vitro data	Irritant
Linalool	Rabbit	Irritant
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Rabbit	Minimal irritation
Alpha-Isomethyl Ionone	Rabbit	Mild irritant
Hexamethylindanopyran	In vitro data	No significant irritation
Linalyl Acetate	Rabbit	Irritant
Methyldihydrojasmonate	Rabbit	No significant irritation
Terpenes and terpenoids, sweet orange-oil	Rabbit	Irritant
Diethyl Phthalate	Rabbit	Minimal irritation
Citral	Rabbit	Irritant
Geraniol	Rabbit	Irritant
GERANYL ACETATE	Rabbit	Irritant
Terpineol	Rabbit	Irritant
p-Mentha-1,4-Diene	In vitro data	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
C8-10 Alcohols Ethoxylated Propoxylated	Rabbit	Corrosive
Polysorbate 20	Rabbit	No significant irritation
Methoxyisopropanol	Not available	Mild irritant
2,6-Dimethyl-7-Octen-2-ol	Rabbit	Severe irritant
Turpentine	Rabbit	Mild irritant
Linalool	Rabbit	Moderate irritant
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Rabbit	No significant irritation
Alpha-Isomethyl Ionone	Rabbit	Moderate irritant
Hexamethylindanopyran	In vitro data	No significant irritation
Linalyl Acetate	Rabbit	Mild irritant
Methyldihydrojasmonate	Rabbit	Mild irritant
Terpenes and terpenoids, sweet orange-oil	Rabbit	Mild irritant
Diethyl Phthalate	Rabbit	Mild irritant
Citral	Rabbit	Severe irritant
Geraniol	Rabbit	Corrosive
GERANYL ACETATE	similar compoun ds	No significant irritation
Terpineol	similar compoun	Moderate irritant

	ds	
p-Mentha-1,4-Diene	In vitro data	No significant irritation

Skin Sensitization

Name	Species	Value
Polysorbate 20	Guinea pig	Not classified
Methoxyisopropanol	Guinea pig	Not classified
2,6-Dimethyl-7-Octen-2-ol	Guinea pig	Not classified
Turpentine	Multiple animal species	Sensitizing
Linalool	Mouse	Sensitizing
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Mouse	Sensitizing
Alpha-Isomethyl Ionone	Mouse	Sensitizing
Hexamethylindanopyran	Guinea pig	Not classified
Linalyl Acetate	Mouse	Sensitizing
Methyldihydrojasmonate	Multiple animal species	Not classified
Terpenes and terpenoids, sweet orange-oil	Mouse	Sensitizing
Diethyl Phthalate	Human and animal	Not classified
Citral	Human and animal	Sensitizing
Geraniol	Human and animal	Sensitizing
GERANYL ACETATE	Mouse	Sensitizing
Terpineol	Mouse	Not classified
p-Mentha-1,4-Diene	In vitro data	Not classified

Photosensitization

Name	Species	Value
Hexamethylindanopyran	Guinea pig	Not sensitizing

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Polysorbate 20	In Vitro	Not mutagenic
Methoxyisopropanol	In Vitro	Not mutagenic
2,6-Dimethyl-7-Octen-2-ol	In Vitro	Not mutagenic
Turpentine	In Vitro	Not mutagenic
Linalool	In Vitro	Not mutagenic
Linalool	In vivo	Not mutagenic
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	In Vitro	Not mutagenic
Alpha-Isomethyl Ionone	In Vitro	Not mutagenic
Hexamethylindanopyran	In Vitro	Not mutagenic
Hexamethylindanopyran	In vivo	Not mutagenic
Linalyl Acetate	In Vitro	Not mutagenic
Methyldihydrojasmonate	In Vitro	Not mutagenic

Methyldihydrojasmonate	In vivo	Not mutagenic
Terpenes and terpenoids, sweet orange-oil	In Vitro	Not mutagenic
Terpenes and terpenoids, sweet orange-oil	In vivo	Not mutagenic
Diethyl Phthalate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Citral	In vivo	Not mutagenic
Citral	In Vitro	Some positive data exist, but the data are not sufficient for classification
Geraniol	In Vitro	Not mutagenic
GERANYL ACETATE	In Vitro	Not mutagenic
GERANYL ACETATE	In vivo	Not mutagenic
Terpineol	In Vitro	Not mutagenic
p-Mentha-1,4-Diene	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Methoxyisopropanol	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Terpenes and terpenoids, sweet orange-oil	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Diethyl Phthalate	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Citral	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Polysorbate 20	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	during organogenesis
Methoxyisopropanol	Inhalation	Not classified for male reproduction	Rat	NOAEL 11 mg/l	2 generation
Methoxyisopropanol	Ingestion	Not classified for female reproduction	Mouse	NOAEL 3,328 mg/kg/day	2 generation
Methoxyisopropanol	Inhalation	Not classified for female reproduction	Rat	NOAEL 3.7 mg/l	2 generation
Methoxyisopropanol	Ingestion	Not classified for male reproduction	Mouse	NOAEL 3,328 mg/kg	2 generation
Methoxyisopropanol	Ingestion	Not classified for development	Rat	NOAEL 370 mg/kg	during gestation
Methoxyisopropanol	Inhalation	Not classified for development	Rat	NOAEL 3.7 mg/l	2 generation
2,6-Dimethyl-7-Octen-2-ol	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,140 mg/kg/day	1 generation
2,6-Dimethyl-7-Octen-2-ol	Ingestion	Not classified for development	Rat	NOAEL 1,068 mg/kg/day	1 generation
2,6-Dimethyl-7-Octen-2-ol	Ingestion	Not classified for female reproduction	Rat	NOAEL 524 mg/kg/day	1 generation
Turpentine	Ingestion	Not classified for development	Rat	NOAEL 250 mg/kg/day	during organogenesis
Linalool	Ingestion	Not classified for female reproduction	Rat	NOAEL 365 mg/kg/day	premating into lactation
Linalool	Ingestion	Not classified for development	Rat	NOAEL 365 mg/kg/day	premating into lactation
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	during gestation
Alpha-Isomethyl Ionone	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	premating into lactation
Alpha-Isomethyl Ionone	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	42 days

Alpha-Isomethyl Ionone	Ingestion	Not classified for development	Rat	NOAEL 30 mg/kg/day	during gestation
Hexamethylindanopyran	Ingestion	Not classified for female reproduction	Rat	NOAEL 92 mg/kg/day	2 generation
Hexamethylindanopyran	Ingestion	Not classified for male reproduction	Rat	NOAEL 94 mg/kg/day	2 generation
Hexamethylindanopyran	Ingestion	Not classified for development	Rat	NOAEL 150 mg/kg/day	during gestation
Methyldihydrojasmonate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Methyldihydrojasmonate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	42 days
Methyldihydrojasmonate	Ingestion	Not classified for development	Rat	NOAEL 120 mg/kg/day	during gestation
Terpenes and terpenoids, sweet orange-oil	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	premating & during gestation
Terpenes and terpenoids, sweet orange-oil	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis
Diethyl Phthalate	Ingestion	Not classified for female reproduction	Mouse	NOAEL 1,625 mg/kg/day	2 generation
Diethyl Phthalate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,625 mg/kg	2 generation
Diethyl Phthalate	Ingestion	Not classified for development	Rat	NOAEL 1,900 mg/kg/day	during organogenesis
Citral	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	2 generation
Citral	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	2 generation
Citral	Ingestion	Not classified for development	Rabbit	NOAEL 60 mg/kg/day	during gestation
Citral	Inhalation	Not classified for development	Rat	NOAEL 0.21 mg/l	during organogenesis
Geraniol	Dermal	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	premating into lactation
Geraniol	Ingestion	Not classified for female reproduction	Rat	NOAEL 800 mg/kg/day	2 generation
Geraniol	Dermal	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	28 days
Geraniol	Ingestion	Not classified for male reproduction	Rat	NOAEL 800 mg/kg/day	2 generation
Geraniol	Dermal	Not classified for development	Rat	NOAEL 300 mg/kg/day	premating into lactation
Geraniol	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	during gestation
Terpineol	Ingestion	Toxic to male reproduction	similar compounds	NOAEL 250 mg/kg/day	5 weeks
p-Mentha-1,4-Diene	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	28 days
p-Mentha-1,4-Diene	Ingestion	Toxic to female reproduction	Rat	NOAEL 100 mg/kg/day	premating into lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
C8-10 Alcohols Ethoxylated Propoxylated	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Methoxyisopropanol	Dermal	central nervous system depression	Not classified	Rabbit	NOAEL 1,800 mg/kg	13 weeks

Methoxyisopropanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2,6-Dimethyl-7-Octen-2-ol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
2,6-Dimethyl-7-Octen-2-ol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
Turpentine	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Turpentine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Turpentine	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Linalool	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
Alpha-Isomethyl Ionone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not Available	
Hexamethylindanopyran	Dermal	photoirritation	Not classified	Multiple animal species	NOAEL Not Available	
Linalyl Acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
Terpenes and terpenoids, sweet orange-oil	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Terpenes and terpenoids, sweet orange-oil	Ingestion	nervous system	Not classified		NOAEL Not available	
Citral	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
Geraniol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
GERANYL ACETATE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Terpineol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not Available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Polysorbate 20	Ingestion	heart | endocrine system | gastrointestinal tract | hematopoietic system | liver | muscles | nervous system | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 2,000 mg/kg/day	2 years
Methoxyisopropanol	Dermal	kidney and/or bladder	Not classified	Rabbit	NOAEL 1,800 mg/kg/day	13 weeks
Methoxyisopropanol	Dermal	hematopoietic system	Not classified	Rabbit	NOAEL 1,000 mg/kg/day	3 weeks
Methoxyisopropanol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 3.7 mg/l	13 weeks
Methoxyisopropanol	Inhalation	liver	Not classified	Rat	NOAEL 11 mg/l	13 weeks

Methoxyisopropanol	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 2.2 mg/l	10 days
Methoxyisopropanol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 920 mg/kg/day	13 weeks
Methoxyisopropanol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 920 mg/kg/day	13 weeks
2,6-Dimethyl-7-Octen-2-ol	Ingestion	liver	Not classified	Rat	NOAEL 842 mg/kg/day	21 days
Turpentine	Inhalation	liver | immune system | respiratory system	Not classified	Rat	NOAEL 2.2 mg/l	14 weeks
Turpentine	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 0.14 mg/l	14 weeks
Linalool	Dermal	skin | heart | endocrine system | hematopoietic system | liver | immune system | muscles | nervous system | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	91 days
Linalool	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 53 mg/kg/day	95 days
Linalool	Ingestion	endocrine system | hematopoietic system | liver | nervous system | eyes	Not classified	Rat	NOAEL 498 mg/kg/day	95 days
Linalool	Ingestion	immune system	Not classified	Mouse	NOAEL 375 mg/kg/day	5 days
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Dermal	kidney and/or bladder | hematopoietic system | eyes	Not classified	Rat	NOAEL 300 mg/kg/day	90 days
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 80 mg/kg/day	90 days
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 80 mg/kg/day	90 days
1H-3A,7-METHANOAZULENE, ETHANONE DERIV.	Ingestion	endocrine system | heart | hematopoietic system | immune system | nervous system | eyes	Not classified	Rat	NOAEL 250 mg/kg/day	90 days
Alpha-Isomethyl Ionone	Dermal	skin | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 50 mg/kg/day	90 days
Alpha-Isomethyl Ionone	Ingestion	endocrine system | hematopoietic system | liver | kidney and/or bladder | heart | skin | gastrointestinal tract | bone, teeth, nails, and/or hair | immune system | muscles | nervous system | eyes | respiratory system | vascular system	Not classified	Rat	NOAEL 500 mg/kg/day	90 days
Hexamethylindanopyran	Ingestion	heart | skin | endocrine system | gastrointestinal tract	Not classified	Rat	NOAEL 150 mg/kg/day	90 days

		| bone, teeth, nails, and/or hair | hematopoietic system | liver | immune system | muscles | nervous system | eyes | kidney and/or bladder | respiratory system | vascular system				
Methyldihydrojasmonate	Ingestion	heart | skin | endocrine system | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | liver | immune system | muscles | nervous system | eyes | kidney and/or bladder | respiratory system | vascular system	Not classified	Rat	NOAEL 100 mg/kg/day	90 days
Terpenes and terpenoids, sweet orange-oil	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
Terpenes and terpenoids, sweet orange-oil	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Terpenes and terpenoids, sweet orange-oil	Ingestion	heart | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks
Diethyl Phthalate	Dermal	skin	Not classified	Rat	NOAEL 855 mg/kg/day	2 years
Diethyl Phthalate	Dermal	liver | kidney and/or bladder	Not classified	Rat	NOAEL 855 mg/kg	2 years
Diethyl Phthalate	Dermal	heart	Not classified	Rat	NOAEL 855 mg/kg/day	2 years
Diethyl Phthalate	Dermal	gastrointestinal tract | nervous system | respiratory system	Not classified	Rat	NOAEL 855 mg/kg	2 years
Diethyl Phthalate	Ingestion	heart	Not classified	Rat	NOAEL 3,710 mg/kg/day	16 weeks
Diethyl Phthalate	Ingestion	nervous system | kidney and/or bladder	Not classified	Rat	NOAEL 3,710 mg/kg	16 weeks
Diethyl Phthalate	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 3,160 mg/kg	6 weeks
Diethyl Phthalate	Ingestion	liver	Not classified	Rat	NOAEL 1,753 mg/kg	3 weeks
Diethyl Phthalate	Ingestion	endocrine system	Not classified	Rat	NOAEL 3,710 mg/kg/day	16 weeks
Diethyl Phthalate	Ingestion	muscles | respiratory system	Not classified	Rat	NOAEL 3,710 mg/kg	16 weeks
Citral	Ingestion	gastrointestinal tract | hematopoietic system | kidney and/or bladder | heart | skin | endocrine system |	Not classified	Rat	NOAEL 1,330 mg/kg/day	90 days

		bone, teeth, nails, and/or hair | liver | immune system | nervous system | respiratory system | vascular system				
Geraniol	Ingestion	endocrine system | liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Geraniol	Ingestion	heart | bone, teeth, nails, and/or hair | hematopoietic system | muscles | kidney and/or bladder	Not classified	Rat	NOAEL 550 mg/kg/day	112 days
p-Mentha-1,4-Diene	Ingestion	hematopoietic system | liver | immune system | nervous system | kidney and/or bladder	Not classified	Rat	NOAEL 250 mg/kg/day	28 days

Aspiration Hazard

Name	Value
Turpentine	Aspiration hazard
Terpenes and terpenoids, sweet orange-oil	Aspiration hazard
p-Mentha-1,4-Diene	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards
Not applicable

Health Hazards
Acute toxicity
Reproductive toxicity
Respiratory or Skin Sensitization
Serious eye damage or eye irritation
Skin Corrosion or Irritation

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
Hexamethylindanopyran	1222-05-5	Trade Secret < 2

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 3 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include

the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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