

SECTION 1: Identification

1.1. Identification

Product name : Mean Tangerine

1.2. Recommended use and restrictions on use

Recommended use : For use in adhesive resins, fragrances, solvents and degreasing agents

1.3. Supplier

Sanco Industries, Inc.
1819 S. Calhoun Street
Fort Wayne, IN 46802
Phone: 260-426-6281
Toll Free: 888-697-2626

1.4. Emergency telephone number

Emergency number : 24 Hour Contact - CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Skin sensitization Category 1	H317	May cause an allergic skin reaction

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H226 - Flammable liquid and vapor
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing gas/mist/vapors/spray
P264 - Wash hands and other exposed areas thoroughly after handling
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

Mean Tangerine

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P370+P378 - In case of fire: Use foam, carbon dioxide or dry chemicals to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container in accordance with all local, state and federal regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
D-Limonene	(CAS No) 5989-27-5	> 94	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/injuries after inhalation : May cause an allergic skin reaction.
- Symptoms/injuries after skin contact : Causes skin irritation.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : Flammable liquid and vapor.
- Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.

Mean Tangerine

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing gas/mist/vapors/spray.
Hygiene measures : Wash hands and other exposed areas thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

D-Limonene (5989-27-5)

AIHA	WEEL TWA (ppm)	30 ppm
------	----------------	--------

8.2. Appropriate engineering controls

Use in a well-ventilated area and ensure an emergency eye wash station is located in the vicinity of use.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing including chemically resistant apron

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

Mean Tangerine

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless to pale yellow liquid
Odor	: Mild citrus orange
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 154 °C
Flash point	: 46 °C (Pensky Martens Closed Cup)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Flammable liquid and vapor.
Vapor pressure	: 2 mm Hg @25°C
Relative vapor density at 20 °C	: > 1
Relative density	: 0.84 @25°C
Solubility	: Negligible in water.
Log Pow	: No data available
Auto-ignition temperature	: 238 °C Calculated
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: LEL: 0.7 vol % UEL: 6.1 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is not reactive under normal conditions of use.

10.2. Chemical stability

Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fumes. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

D-Limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5 g/kg
ATE US (oral)	4400.000 mg/kg body weight

Mean Tangerine

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

D-Limonene (5989-27-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: Causes skin irritation.

SECTION 12: Ecological information

12.1. Toxicity

D-Limonene (5989-27-5)	
LC50 fish 1	0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

12.2. Persistence and degradability

Mean Tangerine	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Mean Tangerine	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information	: Avoid release to the environment.
-------------------	-------------------------------------

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Exception for Class 3 (flammable and combustible liquids) 49 CFR 173.150(f)

Transport document description	: NA1993 Combustible liquid, n.o.s. (Limonene), 3, III, Marine pollutant
UN-No.(DOT)	: NA1993
Proper Shipping Name (DOT)	: Combustible liquid, n.o.s. (Limonene), Marine pollutant
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203

Mean Tangerine

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	: 128
Other information	: No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

Mean Tangerine	
SARA Section 311/312 Hazard Classes	Flammable Skin corrosion or irritation Serious eye damage or irritation Respiratory or skin sensitization

D-Limonene (5989-27-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

D-Limonene (5989-27-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

D-Limonene (5989-27-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

D-Limonene (5989-27-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Mean Tangerine

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

H226	Flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

SDS US (GHS HazCom 2012)

While Sanco Industries, Inc. believes the data set forth is accurate to the best of our knowledge, Sanco Industries, Inc. makes no warranties and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration and verification.