

500650 GERANYL TIGLATE

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1. IDENTIFICATION

Product Description: GERANYL TIGLATE

CAS # 7785-33-3 **FEMA Number** 4044

Other means of identification

Vigon Item # 500650

Recommended use Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance

compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.

Recommended restrictions For Manufacturing Use Only

Company 24 Hour Emergency Response Information

Vigon International, Inc. INFOTRAC (ACCT# 78928);

127 Airport Road 1-800-535-5053 WITHIN THE U.S.A.
E. Stroudsburg, PA 18301 1-352-323-3500 OUTSIDE THE U.S.A.

For information call: 570-476-6300

Web Site: www.vigon.com

2. HAZARD(S) IDENTIFICATION

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 3

Environmental hazards Not classified.

Label elements

Hazard symbol None.
Signal word Warning

Hazard statement

H316 Causes mild skin irritation.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response

P332 + P313 If skin irritation occurs: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances



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Chemical name	Common name and synonyms	CAS number	%
GERANYL TIGLATE	(E)-3,7-Dimethyl-2,6-octadienyl 2-methylcrotonate [(2E)-3,7-dimethylocta-2,6-dienyl] (E)-2-methylbut-2-enoate trans-3,7- dimethyl-2,6-octadien-1-yl cis-alpha,beta-dimethyl acrylate geranyl 2-methyl crotonate 2,6- octadien-1-ol, 3,7-dimethyl-, 2-methyl-2-butenoate, (E,E,E)-	7785-33-3	100

4. FIRST-AID MEASURES

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or

persist.

Mild skin irritation.

Skin contact Take off immediately all contaminated clothing. Get medical attention if irritation develops and

persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and

persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if Ingestion

the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low

so that stomach vomit doesn't enter the lungs.

Most important

symptoms/effects, acute and

delayed

Not available.

Indication of immediate medical attention and special treatment

needed

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from

the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full

facepiece operated in the positive pressure demand mode when fighting fires.

Fire fighting

equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods Use water spray to cool unopened containers.

General fire hazards Static charges generated by emptying package in or near flammable vapor may cause flash fire.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor.

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment.

7. HANDLING AND STORAGE

Precautions for safe handling

Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Chemical resistant gloves.

Other Not available.



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Respiratory protection Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must

be provided.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Refer to Spec Sheet

Physical state Liquid.
Form Liquid.

Color Refer to Spec Sheet

Odor Characteristic.
Odor threshold Not available.
pH Not available.
Melting point/freezing point Not available.

Initial boiling point and boiling

range

429.8 °F (221 °C)

Flash point > 200.0 °F (> 93.3 °C) Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0 mm Hg at 20 °C

Vapor density 8.2

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Flammability class Combustible IIIB estimated

Molecular formula C15H24O2



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Molecular weight 236.35 g/mol Specific gravity 0.92 at 25 °C

10. STABILITY AND REACTIVITY

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous No dangerous reaction known under conditions of normal use.

reactions

Conditions to avoid

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected.

Skin contact Causes mild skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation. Causes mild eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the

physical, chemical and toxicological characteristics

Mild skin irritation.

Information on toxicological effects

Acute toxicity

Product Species Test Results

GERANYL TIGLATE (CAS 7785-33-3)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

Oral

LD50 Rat

> 5000 mg/kg

Skin corrosion/irritation Causes mild skin irritation.

Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

^{*} Estimates for product may be based on additional component data not shown.



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Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructionsDo not discharge into drains, water courses or onto the ground. Do not allow this material to drain

into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or

used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code Not established.

Waste from residues / unused

products

Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. TRANSPORT INFORMATION

ADN

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

DOT

BULK

Not regulated as dangerous goods.



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DOT

NON-BULK

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)



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US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Inventory name

Not listed.

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

On inventory (yes/no)*

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

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country(s).

HMIS® ratings Health: 1

Flammability: 1 Physical hazard: 0

^{16.} OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION



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Disclaimer

Vigon cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.