



SAFETY DATA SHEET

A-0080 ALLYL HEPTOATE FCC

Revision Date: 10-27-2014

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Version # 01

Print Date: 10-27-2014

1. IDENTIFICATION

Product Description: ALLYL HEPTOATE FCC
CAS # 142-19-8
FEMA Number 2031
Other means of identification
Vigon Item # A-0080
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

Vigon International, Inc.
127 Airport Road
E. Stroudsburg, PA 18301
For information call: 570-476-6300
Web Site: www.vigon.com

24 Hour Emergency Response Information

INFOTRAC (ACCT# 78928);
1-800-535-5053 WITHIN THE U.S.A.
1-352-323-3500 OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazards	Flammable liquids	Category 4
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 3
	Skin corrosion/irritation	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

Label elements



Signal word

Danger

Hazard statement

H227	Combustible liquid.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.



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Precautionary statement

Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260	Do not breathe mist or vapor.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing.
P280	Wear protective gloves/eye protection/face protection.

Response

P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see this label).
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use appropriate media to extinguish.
P391	Collect spillage.

Storage

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Hazardous components Chemical name	Common name and synonyms	CAS number	%
ALLYL HEPTOATE	allyl enanthate ALLYL HEPTANOATE prop-2-enyl heptanoate Heptanoic acid 2-propen-1-yl ester allyl heptylate	142-19-8	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.

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.



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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.
Ingestion	Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if 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	Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Not available.
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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	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.
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Methods and materials for containment and cleaning up

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.

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).

Appropriate engineering controls

Use explosion-proof ventilation equipment to stay below exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes.

Skin protection

Hand protection

Chemical resistant gloves.

Other

Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. 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.



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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	410 °F (210 °C)
Flash point	175.0 °F (79.4 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
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	0.03 kPa at 25 °C 0.16 mm Hg at 20 °C
Vapor density	5.9
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Flammability class	Combustible IIIB estimated
Molecular formula	C10H18O2
Molecular weight	170.25 g/mol
Specific gravity	0.88 at 25 °C

10. STABILITY AND REACTIVITY

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



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Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. 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

Ingestion	Harmful if swallowed.
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact	Toxic in contact with skin. Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation. Causes mild eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Toxic in contact with skin. Harmful if swallowed.

Product	Species	Test Results
ALLYL HEPTOATE (CAS 142-19-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	810 mg/kg
<i>Oral</i>		
LD50	Mouse	630 mg/kg Remarks: Behavioral:Somnolence (general depressed activity).
	Rat	500 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.

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

Skin corrosion/irritation	Causes skin irritation. Skin - Human - Mild skin irritation - 48 h Skin - rabbit - Moderate skin irritation - 24 h Humans: No skin irritation @ 2%
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation. rabbit: Mild eye irritation @ 100% No eye irritation



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Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Humans: No sensitizing effect @ 2%

Germ cell mutagenicity Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity No indication of reprotoxic effects in animal tests.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not available.

Chronic effects May cause damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Product	Species	Test Results	
ALLYL HEPTOATE (CAS 142-19-8)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	0.89 mg/l, 48 hours OECD 202/ ISO 6341
Fish	LC50	Fish	0.655 mg/l, 96 hours

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

Persistence and degradability Not readily biodegradable.
40%/28 d, OECD 301D
Readily biodegradable.
83%/34 d, OECD 301F
Readily biodegradable.
92%/28 d, OECD 301B

Bioaccumulative potential Not available.

Bioconcentration factor (BCF)
123.4, (calculated)

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.



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13. DISPOSAL CONSIDERATIONS

Disposal instructions	Do 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

UN number	2810
UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Transport hazard class(es)	6.1(PGIII)
Subsidiary class(es)	-
Packing group	III
Environmental hazards	Yes
Labels required	6.1

Read safety instructions, SDS and emergency procedures before handling.

ADR

UN number	2810
UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Transport hazard class(es)	6.1(PGIII)
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Tunnel restriction code	E
Labels required	6.1
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

UN number	2810
UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Transport hazard class(es)	6.1(PGIII)
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	6.1

Read safety instructions, SDS and emergency procedures before handling.

DOT

BULK

UN number	2810
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Proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Hazard class 6.1(PGIII)
Packing group III
Environmental hazards
Marine pollutant Yes
Special precautions Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB3, T7, TP1, TP28
Packaging exceptions 153
Packaging non bulk 203
Packaging bulk 241
6.1

DOT

NON-BULK

UN number 2810
Proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Hazard class 6.1(PGIII)
Packing group III
Special precautions Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB3, T7, TP1, TP28
Packaging exceptions 153
Packaging non bulk 203
Packaging bulk 241
6.1

IATA

UN number 2810
UN proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Transport hazard class(es) 6.1(PGIII)
Subsidiary class(es) -
Packing group III
Environmental hazards Not available.
Labels required 6.1
ERG code 6L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number 2810
UN proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (ALLYL HEPTOATE)
Transport hazard class(es) 6.1(PGIII)
Subsidiary class(es) -
Packing group III
Environmental hazards
Marine pollutant Yes
Labels required 6.1
EmS F-A, S-A
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.



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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

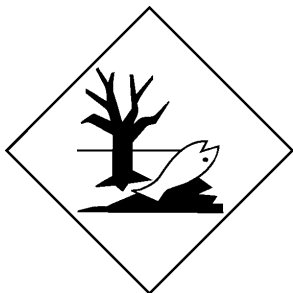
Not applicable.

Read safety instructions, SDS and emergency procedures before handling.

ADN; ADR; DOT BULK; DOT NON-BULK; IATA; IMDG; RID



Marine pollutant



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 - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No



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SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

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 (SDWA)

Not regulated.

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

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes



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Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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 country(s).

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

Issue date	10-27-2014
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Version #	01
HMIS® ratings	Health: 2* Flammability: 2 Physical hazard: 0

Disclaimer

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.