
1. PRODUCT AND COMPANY IDENTIFICATION

Product identifiers

Product name : Vinyl neodecanoate, mixture of isomers (SHIVENA 10)

Product Number : 134481

CAS-No. : 51000-52-3

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H227

Combustible liquid.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P273

Avoid release to the environment.

P280

Wear protective gloves/ eye protection/ face protection.

P370 + P378

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P391

Collect spillage.

P403 + P235

Store in a well-ventilated place. Keep cool.

P501

Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Formula : C₁₂H₂₂O₂
Molecular weight : 198.30 g/mol
CAS-No. : 51000-52-3
EC-No. : 256-905-8

Hazardous components

Component	Classification	Concentration
Vinyl neodecanoate		
	Flam. Liq. 4; Aquatic Acute 1; Aquatic Chronic 1; H227, H410	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

Extinguishing media Suitable

extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Combustible liquids

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- | | |
|---|--|
| a) Appearance | Form: liquid
Colour: colourless |
| b) Odour | ester-like |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | Melting point/range: < -73.49 °C (< -100.28 °F) - OECD Test Guideline 102 |
| f) Initial boiling point and boiling range | 60 - 216 °C (140 - 421 °F) - lit. |
| g) Flash point | 83 °C (181 °F) - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | ca.0.4 hPa (0.3 mmHg) at 25 °C (77 °F) - OECD Test Guideline 104 |
| l) Vapour density | No data available |
| m) Relative density | 0.882 g/cm ³ at 25 °C (77 °F) - lit. |
| n) Water solubility | ca.0.0052 g/l at 20 °C (68 °F) - slightly soluble |
| o) Partition coefficient: n-octanol/water | log Pow: ca.4.9 at 20 °C (68 °F) - OECD Test Guideline 107 |
| p) Auto-ignition temperature | ca.267 - 279 °C (513 - 534 °F) at 990.10 - 1,005.10 hPa (742.64 - 753.89 mmHg) |
| q) Decomposition temperature | No data available |
| r) Viscosity | ca.2.1 mm ² /s at 20 °C (68 °F) - |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

Other safety information

No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Contains the following stabiliser(s):

Mequinol (5 ppm)

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents
Strong oxidizing agents, Zinc, Copper

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - > 8,850 mg/kg

LC50 Inhalation - Rat - male and female - 4 h - > 2.6 mg/l
(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 15,500 mg/kg

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Maximisation Test - Guinea pig

Result: Does not cause skin sensitisation.
(OECD Test Guideline 406)

Germ cell mutagenicity

Ames test

S. typhimurium

Result: negative

Mouse

lymphocyte

Result: negative

Rat - male and female

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Reproductive toxicity - Rat - male and female - Oral

No adverse effect has been observed in chronic toxicity tests.

Developmental Toxicity - Rat - Oral

No adverse effect has been observed in chronic toxicity tests.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity Rat - male and female - Oral - NOAEL : \geq 1,000 mg/kg

RTECS: Not available

Central nervous system depression, Dizziness, Drowsiness, Headache, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.84 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 1.8 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (green algae) - 2.8 - 4.4 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - \geq 500 mg/l - 3 h (OECD Test Guideline 209)

Persistence and degradability

Biodegradability aerobic - Exposure time 28 d
Result: 14 - 17 % - Not readily biodegradable.
(OECD Test Guideline 301D)

Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 10 d

Bioconcentration factor (BCF): 1,100 - 1,390
(OECD Test Guideline 305)

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

NA-Number: 1993 Class: NONE Packing group: III
 Proper shipping name: Combustible liquid, n.o.s. (Vinyl neodecanoate)
 Reportable Quantity (RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Vinyl neodecanoate)
 Marine pollutant:yes

IATA

UN number: 3082 Class: 9 Packing group: III
 Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Vinyl neodecanoate)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Vinyl neodecanoate	51000-52-3	2009-07-17

New Jersey Right To Know Components

	CAS-No.	Revision Date
Vinyl neodecanoate	51000-52-3	2009-07-17

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Flam. Liq.	Flammable liquids
H227	Combustible liquid.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

HMIS Rating

Health hazard:	0
Chronic Health Hazard:	
Flammability:	2
Physical Hazard	0

NFPA Rating

Health hazard:	0
Fire Hazard:	2
Reactivity Hazard:	0

END OF MSDS