

Product name: ISOMATE-PTB TT

1. Identification of the substance/mixture and of the company

Product identifier:

Identification of the substance : Peachtwig borer(PTB) pheromone technical

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

This technical is the mixture of (E)-5-decenyl acetate and (E)-5-decen-1-ol.
Pheromone for mating disruption

Important Notice

This product contains mixture.

This SDS applies only in case that the container breaks and the mixture is set free.

All information given hereinafter refer to the contained mixture, the product is safe for use.

Due to the small amount of the chemicals in the product, in case that the container is damaged, a spill of the mixture is highly unlikely.

Details of the supplier of the safety data sheet:

Shin-Etsu Chemical Co., Ltd.

Organic Chemicals Division Finechemicals Department
6-1 Ohtemachi 2-chome, Chiyoda-ku, Tokyo, 100-0004, Japan
Tel: 81-3-3246-5280
Fax: 81-3-3246-5371

Emergency telephone number:

Emergency Telephone Number: 81-3-3246-5280 (Tokyo Japan) (9:00~18:00)
COMPANY URL: <http://www.shinetsu.co.jp>
E-mail contact: pheromone@shinetsu.jp

2. Hazards identification

2.1 Classification of the substance:

GHS Classification

Physical Hazards

Flammable liquids: Not classified

Self-reactive substances: Not classified

Pyrophoric liquids: Not classified

Self-heating substances: Not classified

Substances which, in contact with water, emit flammable gases: Not classified

Oxidizing liquids: Not classified

Health Hazards

Acute toxicity: Not classified

Skin irritation: Category 2

Eye irritation: Not possible

Respiratory sensitization: Not possible

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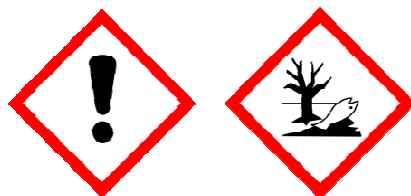
Skin sensitization: Not possible
 Germ cell mutagenicity: Not classified
 Carcinogenicity: Not possible
 Reproductive toxicity: Not possible
 Specific target organ toxicity single exposure: Not possible
 Specific target organ toxicity repeated exposure: Not possible
 Aspiration hazard: Not possible

Environmental Hazards

Acute aquatic toxicity: Category 1
 Chronic aquatic toxicity: Not possible

2.2 Label elements

Pictograms or symbols:



Signal word: Warning

Hazard Statements: H315 Causes skin irritation.
 H400 Very toxic to aquatic life

Precautionary statements: P102 Keep out of reach of children.
 P264 Wash hands thoroughly after handling
 P270 Do not eat, drink or smoke when using this product.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/eye protection/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P332+P313 If skin irritation occurs: Get medical advice/attention.

3. Composition / information on ingredients**Description of the mixture:**

This technical is the mixture of (E)-5-decenyl acetate, (E)-5-decen-1-ol and stabilizers.

Composition/Ingredients:

Name	CAS NO. EINECS NO. (EU)	Classification (67/548/EEC)	Classification (Reg. EC 1272/2008)	Concentration/Range (wt%)
(E)-5-Decenyl acetate	38421-90-8 253-923-8	Xi: R38 N: R50/53	Skin Irrit. 2, H315 Aquatic Toxicity 1, H400	45.4 – 50.1
(E)-5-Decen-1-ol	56578-18-8 260267-6	Xi: R38 N: R50/53	Skin Irrit. 2, H315 Aquatic Toxicity 1, H400	2.6 – 3.1

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4. First aid measures

Persons using this product should consult a physician or other medical professional if an accident involving this product in injury. Specific first-aid measures are as follows:

After inhalation: Supply fresh air; seek medical advice in case of symptoms. When feeling woozy or badly, get medical attention. When victim vomiting, turn his face to sideways for taking breath. If breathing is weak, irregular or has stopped, open his airway, administer artificial respiration immediately, and get medical attention immediately.

After skin contact: Instantly wash with water and soap and rinse thoroughly. If skin irritation continues, seek medical advice. Take off all contaminated clothes. Wash the affected areas with soap or mild detergent and large amount of water.

After eye contact: Gently rinse the affected eyes, including under the eyelids, with clean water for at least 15 minutes. To make it effective, widen the eyelid with fingers and move the eyeball. Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible. When wearing contact lenses, remove them and rinse with clean water for 15 minutes.

After ingestion: If more than trace quantities have been swallowed and if the victim is conscious, wash out his mouth with water and given 250ml of warm water to drink. If victim is unconscious, nothing must be put into the mouth. Seek immediately medical advice.

Prospective acute or late symptoms:

Eye or skin contact: reddening, pain, chemical attack.

Inhalation: dizziness, drowsiness, headache, nausea, weakness feeling.

Safeguard for first aid measure person:

Use self-contained breathing apparatus, chemical cartridge respirator for organic gases, gloves, or other protective equipments as required.

5. Firefighting measures

When igniting high concentrated vapour or mist of this material, may explosion break out by the explosive decomposition. In high oxygen concentrated atmosphere, it has the possibility of combustion or explosion.

Extinguishing media:

Suitable extinguishing agents: CO₂, extinguishing powder or alcohol-resistant foam.

Unsuitable extinguishing agents: High volume water jet.

Special hazards arising from the substance or mixture:

If exposed to heat or flame, it decomposes and may generate toxic irritating gases. Special hazards caused by the material, its products of combustion or flue gases: Carbon monoxide and carbon dioxide.

Specific extinction method:

Work for firefighting from windward. Fire could be expanded by water spray, use appropriate extinguishing media. Transfer the container from near fire to out of area, if safely possible. If it is impossible, cooling down the

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container by plenty of water spraying. Don't use high volume water jet.

Advice for firefighters:

Use self-contained breathing apparatus, chemical cartridge respirator for organic gases, gloves, or other protective equipments for fire-fighting.

Additional information: Collect contaminated firefighting water separately. It must not enter drains.

6. Accidental release measures

Mark off the area near around leakage by the roping, and seal off except authorized.

Note for preventing hazards:

Enough time ventilation is necessary until finishing the clean-up in the case of indoor leakage. Wear and use self-contained breathing apparatus, chemical cartridge respirator for organic gases, protective gloves, protective goggles, protective boots or other protective apparels for handling vapour concentrated around.

Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to federal law. Ensure adequate ventilation. Mark contaminated area. After indoor leakage ensure enough ventilation to finish cleaning up. Wear and use self-contained breathing apparatus, chemical cartridge respirator for organic gases, protective gloves, protective goggles, protective boots or other protective equipment.

For small spills: Absorb spill with dry sand, earth or charcoal, then place in chemical waste container so as not to run out to sewage or drainage trench or penetration into.

For large spills: Collect with pump and transfer to a metal container with seal. Absorb spill with dry sand or charcoal, and prevent spill from entering sewers, watercourses or low areas, and prevent the penetration into the ground. Mop up the residual spill with charcoal or absorbent materials.

Contaminated absorbents must be disposed of by appropriate measures.

Work at the position of windward.

Note for preventing environment hazards:

Salvage by removal methods as possible, comply environmental benchmarks of sewage, earth, water source.

7. Handling and storage**General items:**

Smoking, eating and drinking should be prohibited in the handling or storage area. Keep away from open flames, hot surface and sources of ignition.

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. Avoid contact to skin, eye and clothing.

Keep ignition sources away. Do not smoke, eat or drink in work areas. Do not breathe vapours/mists.

If you become bothered by odour, please stop working and take "first-aid measures" specified in the product SDS. To insulate you from unnecessary odour, it may be recommended to wear a protective apparatus, such as a mask,

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during operations.

Conditions for safe storage, including any incompatibilities:

Observe all local and national regulations for storage of water polluting products.

Do not store together with oxidizing and acidic materials.

Store in cool, dry conditions in tightly closed containers.

Protect from heat and direct sunlight.

8. Exposure controls and personal protection

Control parameters:

This SDS applies only in case that container breaks and the chemicals are set free. All information given herein after refer to the contained chemicals.

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure controls:

Keep away from foodstuffs, beverages and food. Instantly remove any contaminated garments. Avoid contact with eyes and skin. Wash hands during breaks and at the end of the work.

Hand protection: Protective gloves. The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Eye protection: Protective goggles. Face shield etc.

Protective wear for skin and body: Protective boots. Protective apron.

Exposure limits:

ACGH: Not listed.

OSHA: Not listed.

9. Physical and chemical properties

Information on basic physical and chemical properties:

	(E)-5-Decenyl acetate	(E)-5-Decen-1-ol
a) Appearance:	Liquid, colorless to yellowish	Liquid, colorless to yellowish
b) Odour:	Fatty waxy	Fatty waxy
c) Odour threshold:	None	None
d) pH (pH meter):	No information	No information
e) Melting point/freezing point:	<-60°C	-28°C
f) Initial boiling point, boiling range (OECD 103):	185.9 – 224.3°C	113 -118 °C/ 76mmHg
g) Flash point	110°C	62°C
h) Evaporation rate:	No information	No information
i) Flammability (solid/gas)	No information	No information
j) Upper/lower flammability or explosive limits:	No information	No information
k) Vapour pressure (calculated):	2.25 x10 ⁻² mmHg (25°C)	4.7 x10 ⁻³ mmHg (25°C)
l) Vapour density:	No information	No information

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m) Relative density (pycnometer method):	0.882g/cm ³ (25°C)	0.830 g/cm ³ (20°C)
n) Solubility(ies) (OECD 105):	No information	3.7 x10 ⁻³ % (20°C)
o) Partition coefficient: n-octanol/water (OECD 107):	Log Pow = 5.0	Log Pow = 4.1
p) Auto-ignition temperature:	Not tested	Not tested
q) Decomposition temperature:	No information	No information
r) Viscosity (Ubbelohde's method):	No information	No information
s) Explosive properties:	Not explosive (judgement)	Not explosive (judgement)
t) Oxidising properties:	Not oxidizing (judgement)	Not oxidizing (judgement)

10. Stability and reactivity

Reactivity:

May react with oxygen and strong oxidizing agents, such as chlorates, peroxides, etc. Conditions to avoid heat, flames and sparks. Material to avoid oxidizing agents.

Chemical stability:

This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Conditions to avoid:

Avoid contact with excessive heat, sparks or open flame.

Incompatible materials:

Oxidizing agents.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide, but no decomposition if used according to specifications.

11. Toxicological information

Information on toxicological effects:

SCLP: The mixture of (E)-5-decenyl acetate and (E)-5-decen-1-ol.

	Data	Chemical Constituent
Acute toxicity:	Oral LD50	>2,000mg/kg (Rats)
	Dermal LD50	>2,000mg/kg (Rats)
	Inhalation LD50	>5.50mg/l (Rats)
Skin corrosion/irritation:	Slightly to moderate	SCLP
Serious eye damage/Eye irritation:	Slightly to moderate	SCLP
Respiratory or Skin sensitivity:	No sensitizing effect known	SCLP
Germ cell mutagenicity:	Ames test: Negative	SCLP
Carcinogenicity:	IARC	Not listed
	NTP	Not listed
	OSHA	Not listed

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Reproductive toxicity:	No Data	SCLP
Specific target organ toxicity (Single exposure):	No Data	SCLP
Specific target organ toxicity (Repeated exposure):	No Data	SCLP
Aspiration hazard:	No Data	SCLP

12. Ecological information

12.1 Toxicity

Components:

(E)-5-Decenyl acetate

LC₅₀/96h No Data

(E)-5-Decen-1-ol

LC₅₀/96h 2.3mg/l (fathead minnow) * Based on data from similar material

EC₅₀/48h 1.4mg/L (Daphnia magna) * Based on data from similar material

EC₅₀/72h 0.56mg/L (Selenastrum capricomutum) * Based on data from similar material

12.2 Persistence and degradability

Components:

(E)-5-Decenyl acetate

rapidly degradable

(E)-5-Decen-1-ol

rapidly degradable

12.3 Bioaccumulative potential

Components:

(E)-5-Decenyl acetate

Partition coefficient: n-octanol/water log Pow = 5.0

(E)-5-Decen-1-ol

Partition coefficient: n-octanol/water log Pow = 4.1

12.4 Mobility in soil

No data available. Exposure not likely.

12.5 Persistence and degradability:

The product is easily biodegradable.

13. Disposal considerations

Waste treatment methods:

Use this material for its intended purpose. Do not allow product to reach sewage system. If this material must be discarded, meet to criteria of hazardous waste as defined by US EPA or other State and local regulations. If this material classified as hazardous waste, federal law require disposal at licensed hazardous waste disposal facility. When contaminated package is disposed, treated as same as material

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14. Transport information

UN number: None

UN proper shipping name: None

Transport hazard class: (IATA) not regulated (IMDG) not regulated

Packing group: None

Special precautions for user: None

15. Regulatory information

Safety, health and environmental/legislation specific for the substance or mixture:

Listed as carcinogen by NTP, IARC, or OSHA? : NO

Chemical safety assessment:

No chemical safety assessment according to article 14 of Regulation (EC) 1907/2006 has been done.

16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This safety data sheet is offered solely for your information, consideration and investigation. The data described in this SDS consist of data on literature, our acquisition data and analogical inference by data of similar chemical substances or products. Shin-Etsu Chemical Co., Ltd. provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. Final determination of suitability of any material is the sole responsibility of the user.
