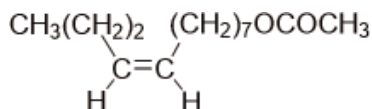


## **(Z)-8-dodecenyl acetate**

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An attractant used in products against certain Lepidoptera.

**Resistance code:** Not classified.



**NOMENCLATURE Approved name:** (Z)-8-dodecen-1-yl acetate.

**Common name:** Component of the *Cryptophlebia ombrodelta* (macadamia nut borer) mating pheromone; Component of the *Cryptophlebia illepida* (koa seedworm) mating pheromone; Component of the *Cydia funebrana* (plum fruit moth) mating pheromone; Component of the *Grapholita molesta* (Oriental fruit moth) mating pheromone.

**CAS RN** 28079-04-1.

**IUPAC** (Z)-8-dodecen-1-yl acetate.

**TARGETS** *Cydia funebrana* (plum fruit moth); *Cryptophlebia illepida* (koa seedworm); *Cryptophlebia ombrodelta* (macadamia nut borer); *Grapholita molesta* (oriental fruit moth).

**CROPS** Pear; Apricot; Apple; Quince; Peach; Prune; Nectarine; Plum; Cherry (all varieties).  
*Indicative list only: always check the country-specific label for detailed list of registered crops.*

**BIOLOGICAL ACTIVITY Mode of action:** Males locate females by following a plume of air rich in the odour of a complex pheromone blend emitted by the females. Evaporation from traps of the synthetic pheromone blend given above attracts male moths to traps. Permeation of the canopy of an orchard with vapours of the synthetic pheromone blend is used to disrupt location of females by males and decrease mating. Very low rates are required to cause mating disruption. The pheromone blend is volatile and distributes throughout the crop easily.

**PRODUCTS** Isomate A/OFM (CBC (Europe) Srl); Isomate OFM rosso (CBC (Europe) Srl); Isomate C/OFM (CBC (Europe) Srl); Checkmate OFM-F (Suterra).

**MAMMALIAN TOXICOLOGY Acute oral LD<sub>50</sub>:** >5050 mg/kg (rat). This is for the entire commercial blend as sold (i.e. including (Z)-8-dodecen-1-ol). **Acute dermal LD<sub>50</sub>:** >5050 mg/kg (rabbit). This is for the entire commercial blend as sold (i.e. including (Z)-8-dodecen-1-ol). **Acute inhalation LD<sub>50</sub>:** Not available. **Acute intratracheal LD<sub>50</sub>:** >2 mg/kg (rabbit). This is for the entire commercial blend as sold (i.e. including (Z)-8-dodecen-1-ol). **Irritancy:** Not available. **Sensitisation:** Not available.

**General comments:** It is not considered to have genotoxic properties.

**ECOLOGICAL TOXICOLOGY Fish:** LD<sub>50</sub> Rainbow trout >0.99 mg/l (96 h). This is for the entire commercial blend as sold (i.e. including (Z)-8-dodecen-1-ol). **Birds:** LD<sub>50</sub> Bobwhite quail >2050 mg/kg This is for the entire commercial blend as sold (i.e. including (Z)-8-

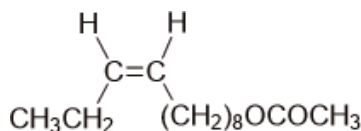
dodecen-1-ol). **Aquatic invertebrates:** EC<sub>50</sub> *Daphnia* spp. >100 mg/l (48 h). This is for the entire commercial blend as sold (i.e. including (Z)-8-dodecen-1-ol). **Algae:** EC<sub>50</sub> 1.2 mg/l (72 h). There are no data available and so, in the registration document, this figure was extrapolated from a chemical in the same class. **General comments:** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**ENVIRONMENTAL FATE** The pheromone diffuses out of the dispenser and is dispersed throughout the orchard.

### (Z)-9-dodecenyl acetate

An attractant used in products against grape moths and shoot borers.

**Resistance code:** Not classified.



**NOMENCLATURE Approved name:** (Z)-9-dodecen-1-yl acetate.

**Common name:** Component of the *Eupoecilia ambiguella* (European grape berry moth) mating pheromone; Component of the *Endopiza viteana* (grape berry moth) mating pheromone; Component of the *Eucosma sonomana* (western pine shoot borer) mating pheromone; Component of the *Eucosma gloriola* (eastern pine shoot borer) mating pheromone. **Other name:** Z9-12Ac.

**CAS RN** 16974-11-1.

**IUPAC** Not applicable.

**BIOGEOGRAPHY** The sex pheromone of the European grape berry moth (*Eupoecilia ambiguella*) was originally isolated from the terminal segments of virgin females.

**TARGETS** *Eupoecilia ambiguella* (vine moth); *Eucosma sonomana* (western pine shoot borer); *Endopiza viteana* (grape berry moth); *Eucosma gloriola* (eastern pine shoot borer).

**CROPS** Forestry (coniferous); Grape. *Indicative list only: always check the country-specific label for detailed list of registered crops.*

**BIOLOGICAL ACTIVITY Mode of action:** Males locate and subsequently mate with female moths by following the pheromone trail or pheromone plume emitted by virgin females. The application of (Z)-9-dodecenyl acetate makes trail following impossible (competition between applied and natural pheromone plume, false trail following). Control is