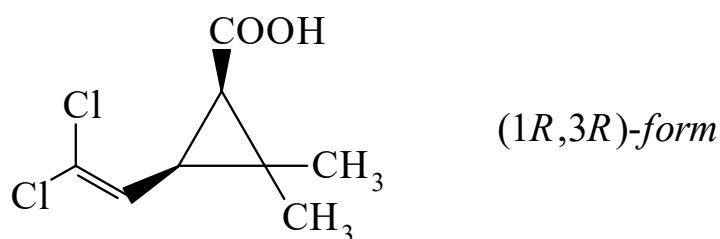




>>Entry Name: Permethric acid, 9Cl

Synonym(s): 3-(2,2-Dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid, 9Cl. 2,2-Dimethyl-3-(2,2-dichlorovinyl)cyclopropanecarboxylic acid



CAS Registry Number: 55701-05-8

Related CAS Registry Numbers(s): 55701-03-6 55701-06-9 55701-08-1 59042-49-8 80225-30-5

Molecular Formula: C<sub>8</sub>H<sub>10</sub>Cl<sub>2</sub>O<sub>2</sub>

Molecular Weight: 209.071

Accurate Mass: 208.005784

Percentage Composition: C 45.96%; H 4.82%; Cl 33.91%; O 15.31%

Biological Use/Importance: Degradn. prod. and parent of insecticides, e.g. Permethrin [DMN56-S](#). Key intermed. for synthetic pyrethroid insecticides, e.g. Cypermethrin [DKZ00-R](#)

>>Variant: (1*R*,3*R*)-form

Synonym(s): (+)-*cis*-form

CAS Registry Number: 55667-40-8

Molecular Formula: C<sub>8</sub>H<sub>10</sub>Cl<sub>2</sub>O<sub>2</sub>

Molecular Weight: 209.071

Accurate Mass: 208.005784

Percentage Composition: C 45.96%; H 4.82%; Cl 33.91%; O 15.31%

Melting Point: Mp 90-91°

Optical Rotation: [α]<sub>D</sub> +28.9 (c, 1 in CHCl<sub>3</sub>)

>>Derivative: Chloride

Extra CAS Registry Numbers(s): 52314-67-7

Molecular Formula: C<sub>8</sub>H<sub>9</sub>Cl<sub>3</sub>O

Molecular Weight: 227.517

Accurate Mass: 225.971896

Percentage Composition: C 42.23%; H 3.99%; Cl 46.75%; O 7.03%

Boiling Point: Bp<sub>0.1</sub> 74-75°

Optical Rotation: [α]<sub>D</sub> +14.75 (c, 1 in CHCl<sub>3</sub>)

>>Variant: (1*R*,3*S*)-form

Synonym(s): (+)-*trans*-form

CAS Registry Number: 55701-03-6

Molecular Formula: C<sub>8</sub>H<sub>10</sub>Cl<sub>2</sub>O<sub>2</sub>

Molecular Weight: 209.071

Accurate Mass: 208.005784

Percentage Composition: C 45.96%; H 4.82%; Cl 33.91%; O 15.31%

Physical Description: Cryst. (petrol)

Melting Point: Mp 90°

Optical Rotation: [α]<sub>D</sub><sup>25</sup> +32.7 (c, 0.86 in CHCl<sub>3</sub>)

>>Variant: (1*S*,3*R*)-form

Synonym(s): (–)-*trans*-form

CAS Registry Number: 55701-09-2

Molecular Formula: C<sub>8</sub>H<sub>10</sub>Cl<sub>2</sub>O<sub>2</sub>

Molecular Weight: 209.071

Accurate Mass: 208.005784

Percentage Composition: C 45.96%; H 4.82%; Cl 33.91%; O 15.31%

Melting Point: Mp 72°

Optical Rotation: [α]<sub>D</sub><sup>20</sup> –33 (c, 1.7 in EtOH). [α]<sub>D</sub> –34.6 (c, 1.9 in EtOH)