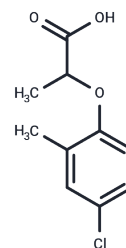


## Mecoprop

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 93-65-2   |
| Formula:          | C <sub>10</sub> H <sub>11</sub> ClO <sub>3</sub>  |
| Molecular Weight: | 214.65  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |



## Biological Description

|               |  |
|---------------|--|
| Description   | Mecoprop (Mecoturf), also known as 2,4-D, is a selective pre-emergence and post-emergence herbicide used on various crops.                                 |
| Targets(IC50) | Others   |
| In vitro      | Mecoprop (6.25 and 62.5 $\mu$ M) increased the concentrations of testosterone (62.5 $\mu$ M) and estradiol (6.25 $\mu$ M) in oocyte incubation medium. [1] |
| In vivo       | Mecoprop disrupts the shell formation of Pacific oyster larvae and is toxic to it EC50 = 42.55 mg/L. [1]   |

## Solubility Information

|                     |   |
|---------------------|---|
| Solubility          | DMSO: 80 mg/mL (372.7 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble)   |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (15.37 mM),Sonication is recommended.<br><i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

### Preparing Stock Solutions

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|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 4.6587 mL | 23.2937 mL | 46.5875 mL |
| 5 mM  | 0.9317 mL | 4.6587 mL  | 9.3175 mL  |
| 10 mM | 0.4659 mL | 2.3294 mL  | 4.6587 mL  |
| 50 mM | 0.0932 mL | 0.4659 mL  | 0.9317 mL  |

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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