

## Product Data Sheet

Product Name: Diphlorethohydroxycarmalol

Cat. No.: GC71877

### Chemical Properties

Cas. No. 138529-04-1

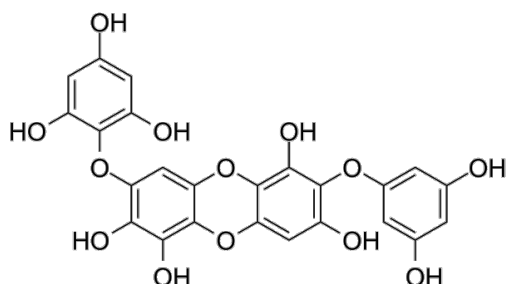
Formula  $C_{24}H_{16}O_{13}$  M.Wt 512.38

Solubility  $H_2O$  : 10 mg/mL (19.52 mM; Need ultrasonic and warming) Storage  $-20^{\circ}C$ , protect from light

General tips For obtaining a higher solubility , please warm the tube at  $37^{\circ}C$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}C$  for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



### Background

Diphlorethohydroxycarmalol, a kind of phlorotannin, is an orally active  $\alpha$ -glucosidase and  $\alpha$ -amylase inhibitor with  $IC_{50}$ s of 0.16 mM and 0.53 mM, respectively. Diphlorethohydroxycarmalol has anti-diabetic activities.

The increase of postprandial blood glucose levels are significantly suppressed in the Diphlorethohydroxycarmalol-administered group than those in the streptozotocin-induced diabetic or normal mice. Moreover, the area under curve (AUC) is significantly reduced via

**Caution: Product has not been fully validated for medical applications. For research use only.**

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Diphlorethohydroxycarmalol (100 mg/kg; p.o.) administration (2022 versus 2210 mmol x min/IL) in the diabetic mice as well as it delays absorption of dietary carbohydrates<sup>[1]</sup>.

### References:

[1]. Soo-Jin Heo, et al. Diphlorethohydroxycarmalol isolated from *Ishige okamurae*, a brown algae, a potent alpha-glucosidase and alpha-amylase inhibitor, alleviates postprandial hyperglycemia in diabetic mice. *Eur J Pharmacol.* 2009 Aug 1;615(1-3):252-6.

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