

## Certificate of Analysis

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**Product Name:** VDM 11 (in Tocrisolve™ 100)

**Catalog No.:** 1686

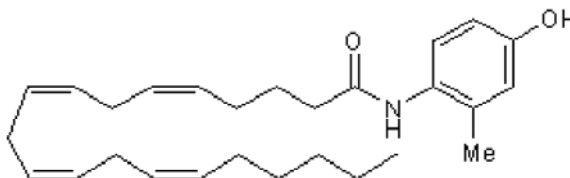
**Batch No.:** 4

**CAS Number:** 313998-81-1

**IUPAC Name:** (5Z,8Z,11Z,14Z)-N-(4-Hydroxy-2-methylphenyl)-5,8,11,14-eicosatetraenamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>27</sub>H<sub>39</sub>NO<sub>2</sub>  
**Batch Molecular Weight:** 409.61  
**Physical Appearance:** White emulsion  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.6% purity  
**Mass Spectrum:** Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

A potent and selective inhibitor of the anandamide membrane transporter (AMT), in water-soluble emulsion (for details see Tocrisolve™ 100). IC<sub>50</sub> values for inhibition of AMT are 4 - 11 mM. Displays negligible agonist activity at the hVR1 receptor and very weak action at CB<sub>1</sub> and CB<sub>2</sub> receptors. K<sub>i</sub> values are > 5 - 10 mM at CB<sub>1</sub> and CB<sub>2</sub>. Active in vivo. VDM 11, pure oil dissolved in ethanol and Tocrisolve Control also available.

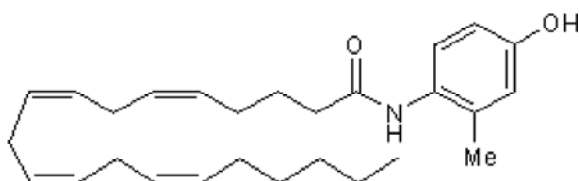
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>27</sub>H<sub>39</sub>NO<sub>2</sub>

Batch Molecular Weight: 409.61

Physical Appearance: White emulsion

**Batch Molecular Structure:**



**Storage:** Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

CAUTION - This product must **not** be frozen.

**Stability and Solubility Advice:**

This product must not be frozen and should be stored at +4°C. Provided that the lid is kept tightly sealed this product will be useable for up to one month.

We recommend that diluted solutions of the Tocrisolve product should be used immediately and must not be frozen.

**Other Information:**

This product is supplied dissolved at a concentration of 10 mg/ml in a soya oil / water (1:4) emulsion. The formulation is emulsified with the block co-polymer, Pluronic F68. It can be diluted with any aqueous medium. This product must not be frozen.

**References:**

**Gubellini et al** (2002) Experimental Parkinsonism alters endocannabinoid degradation: implications for striatal glutamatergic transmission. *J.Neurosci.* **22** 6900. PMID: 12177188.

**Bisogno et al** (2001) The uptake by cells of 2-arachidonoylglycerol, an endogenous agonist of cannabinoid receptors. *Eur.J.Biochem.* **268** 1982. PMID: 11277920.

**De Petrocellis et al** (2001) The activity of anandamide at vanilloid VR1 receptors requires facilitated transport across the cell membrane and is limited by intracellular metabolism. *J.Biol.Chem.* **276** 12856. PMID: 11278420.

**De Petrocellis et al** (2000) Overlap between the ligand recognition properties of the anandamide transporter and the VR1 vanilloid receptor: inhibitors of anandamide uptake with negligible capsaicin-like activity. *FEBS Lett.* **483** 52. PMID: 11033355.

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