

## Derquantel PRODUCT DATA SHEET

issue date 01/06/2020

Product Name: Derquantel

Product Number: D046

CAS Number: 187865-22-1 Molecular Formula:  $C_{28}H_{37}N_3O_4$ 

Molecular Weight: 479.6

Appearance: White solid

Storage Conditions: -20°C

**Description:** Derguantel is a semi-synthetic paraherquamide analogue prepared by

removal of the 2-oxo group in a four-step sequence of N-protection, reduction, N-deprotection and a final reduction. Derquantel is a potent nematocide and

was the first paraherquamide to be successfully commercialised in

combination with avermectin. Derquantel, like other paraherquamides, induces a flaccid paralysis in nematodes thought to be due to inhibition of nicotinic

acetylcholine receptors acting as an antagonist of acetylcholine.

Derquantel is soluble in ethanol, methanol, DMF and DMSO.

**References:** Ligands of the nicotinic acetylcholine receptor as insecticides. Nauen R. et al.

Pestic. Sci. 1999, 55, 608-610.

Semisynthesis of 2-deoxo- and 3-epi-paraherquamide A. Lee B.H. et al.

Bioorg. Med. Chem. Lett. 2001, 11, 553-554.

Marcfortine and paraherquamide class of anthelmintics: Discovery of PNU-

141962. Lee B.H. et al. Current Topics in Med. Chem. 2002, 2, 779.

If you need any help, contact us:  $\underline{\mathsf{info@toku-e.com}}. \ \mathsf{Find} \ \mathsf{more} \ \mathsf{information} \ \mathsf{on:} \ \underline{\mathsf{www.toku-e.com}}/$