

ii) 2002 Study

Test substance:	Thiodiethylene bis (3,5-di-tert-butyl-4-hydroxyhydro cinnamate) CAS No. 41484-35-9 Batch BV 0082899S Purity: Commercial grade ~98%
Method:	This limit test was conducted under OECD Guideline No. 202 (Paris 1981). Young daphnia (8-24h old) are used for the test. The study used 20 daphnia per concentration and control (2 replicates of 10 daphnia each). A single supersaturated solution was prepared by mixing 0.30 mg of material into 300 ml of water, dispersing with ultrasonic treatment for 15 minutes following by 96 hours of intense stirring. The resulting solution was filtered (0.45 µm pore) and used directly. Fluorescent lighting was for 16 hours daily and the temperature was maintained at 20 + or - 1 degrees. Oxygen, pH, temperature were measured at the beginning and at the end of the test. Samples were analysed at 0 and 24 hour exposure. ¹
Species:	<i>Daphnia magna Straus 1820</i>
Type of test:	Static
Test concentration:	100 mg/L (nominal)
Controls:	Blank: Water
Exposure period:	48 hours
Analytical monitoring:	No
GLP:	Yes
Year:	2002
Results:	EC ₅₀ (48 h): > 100 mg/L loading EC ₀ (48 h): > 100 mg/L loading

Immobilization data for the test substance is given in the table below.

Immobilization Data

Concentrations Actual (mg/L)	Immobilization after 48 hours	
	Total	%
Blank	0	0
100.0	0	0

Remarks: The exposure concentrations exceeded the water solubility of the test substance and represent an acceptable limit test of acute toxicity. The study is assigned a reliability code of 1a² (guideline study).

Reference: ¹Acute toxicity of TK 10049 (Irganox L 115) to *Daphnia magna* in a 48-hour immobilization Test, RCC Project No.: 841660, RCC Ltd, CH-4452, Itingen, Switzerland. June 21, 2002.

² Klimisch, H.J., Andreae, M and Tillman, U. A systemic approach for evaluating the quality of experimental toxicological and ecotoxicological data. *Regulatory Toxicology and Pharmacology*. 25:1-5, 1997.