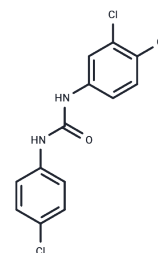


Triclocarban

Chemical Properties

CAS No. : 101-20-2
Formula: C₁₃H₉Cl₃N₂O
Molecular Weight: 315.58
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Triclocarban (Cutisan), an antimicrobial agent, is used in personal cleaning products.
Targets(IC50)	Antibacterial
In vitro	Triclocarban (300 nM) potentiates the cytotoxicity of 300 μM H ₂ O ₂ in rat thymocytes. Triclocarban (300 nM) itself does not increase the population of dead cells, it facilitates the process of cell death induced by H ₂ O ₂ , resulting in further increase in the population of dead cells [1]. Triclocarban exerts estrogenic activities by inducing luciferase activities in an ER reporter gene assay, promoting the proliferation of the MCF-7 cells, up-regulating the expression of pS2 and down-regulating ERα expression at both the mRNA and protein levels in the MCF-7 cells [2].
In vivo	Triclocarban, when used in soap during showering, is significantly absorbed by humans, with its peak concentration (C _{max}) in whole blood ranging between 23 nM and 530 nM[1]. While exposure to triclocarban during pregnancy does not impact the viability of pregnancy, exposure during lactation adversely affects offspring survival[3].

Solubility Information

Solubility	DMSO: 45 mg/mL (142.59 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1688 mL	15.8438 mL	31.6877 mL
5 mM	0.6338 mL	3.1688 mL	6.3375 mL
10 mM	0.3169 mL	1.5844 mL	3.1688 mL
50 mM	0.0634 mL	0.3169 mL	0.6338 mL

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.

Reference

Kanbara Y, et al. Nanomolar concentration of triclocarban increases the vulnerability of rat thymocytes to oxidative stress. J Toxicol Sci. 2013 Feb;38(1):49-55.

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