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PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME:	Tetrodotoxin
CATALOG #:	00060 (Citrate Free), 00061 (with Citrate)
MOLECULAR INFORMATION:	$C_{11}H_{17}N_3O_8$ Mwt: 319.28 [4368-28-9] O O O H N ⁺ H ₂
PROPERTIES:	HOCH ₂ HO OH
Color & Form	White powder Tetrodotoxin with citrate may appear as a thin, glassy material at the bottom or on the wall of the glass vial. This is normal. The material is packaged by lyophilization and the final form of the material may depend on the speed of lyophilization. With high speed lyophilization the material may appear fluffy. At low speed lyophilization the material may look thin, glassy and coated on the wall of the vial. This latter form is easier and safer for handling than the powdery fluffy form.
Purity Solubility	≥ 98% by Elemental Analysis 00060 - soluble in acidic buffer (pH 4.8). 00061 and 00062- soluble in water. Avoid alkaline or strongly acidic solution.
STORAGE AND HANDLING:	Stable for at least one year at 4° C after receipt. Stable for at least three years at -20° C after receipt.
APPLICATION:	Tetrodotoxin (TTX) interferes with nerve transmission by selectively and reversibly blocking the voltage-gated, excitable sodium channels. It has become a useful tool in neurobiology to study excitable cell membranes.
	Ref.: 1) Lysko, P.G. et al. <i>Stroke</i> 25 , 2476(1994); 2) Hu, S.L. and Kao, C.Y. <i>Toxicon</i> 23 , 723(1985); 3) Nakamura, M. and Yasumoto, T. <i>Toxicon</i> 23 , 271(1985).
TOXICITY:	LD ₅₀ : 334 μ g/kg, oral, mouse; LD ₅₀ : 7.3 μ g/kg, intravenous, mouse.
FIRST AID:	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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