



# Nigericin sodium PRODUCT DATA SHEET

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<b>Product Name:</b>	Nigericin sodium
<b>Product Number:</b>	N015
<b>CAS Number:</b>	28643-80-3
<b>Molecular Formula:</b>	$C_{40}H_{67}NaO_{11}$
<b>Molecular Weight:</b>	746.94
<b>Form:</b>	Powder
<b>Appearance:</b>	White to off-white powder
<b>Storage Conditions:</b>	2-8°C
<b>Description:</b>	<p>Nigericin sodium is an antibiotic ionophore produced by <i>Streptomyces hygroscopicus</i>. Nigericin is insoluble in water but soluble in methanol and chloroform (10 mg/mL).</p> <p>This product is considered a dangerous good. Quantities above 1 g may be subject to additional shipping fees. Please contact us for specific questions.</p>
<b>Mechanism of Action:</b>	Nigericin sodium acts as an antiporter of H and K ions by exchanging K for H. This ionic imbalance rapidly decreases the intracellular pH.
<b>Cancer Applications</b>	One study showed the increased intracellular acidity halted DNA synthesis in Ehrlich ascites carcinoma lending support to use as a chemotherapeutic agent.
<b>References:</b>	Margolis, Leonid B., et al. "K <sup>+</sup> /H <sup>+</sup> -antiporter Nigericin Arrests DNA Synthesis in Ehrlich Ascites Carcinoma Cells." PNAS 86 (1989): 6626-629. Pnas.org. Web. 11 Sept. 2012.

If you need any help, contact us: [info@toku-e.com](mailto:info@toku-e.com). Find more information on: [www.toku-e.com/](http://www.toku-e.com/)