

## Menadione PRODUCT DATA SHEET

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Product Name: Menadione

Product Number: M079

CAS Number: 58-27-5 Molecular Formula:  $C_{11}H_8O_2$ 

Molecular Weight: 172.18

**Description:** Menadione is also known as vitamin K3. It is the metabolic precursor of the

vitamin K2 in mammals, so it is often used as a dietary supplement. It has also

been tested as a possible anticancer agent able to induce apoptosis.

TOKU-E offers two forms of menadione: menadione (M079) and <u>menadione</u> <u>sodium bisulfite (M080)</u>. Both forms have similar potencies and are suitable for microbiology use; however, menadione sodium bisulfite is easier to work

with in aqueous solution.

References: Hirota, Y., Tsugawa, N., Nakagawa, K., Suhara, Y., Tanaka, K., Uchino, Y., . . .

Okano, T. (2013). Menadione (Vitamin K3) Is a Catabolic Product of Oral Phylloquinone (Vitamin K1) in the Intestine and a Circulating Precursor of

Tissue Menaquinone-4 (Vitamin K2) in Rats. Journal of Biological Chemistry, 288(46), 33071-33080. doi:10.1074/jbc.m113.477356

Suresh, S., Raghu, D., & Karunagaran, D. (2013). Menadione (Vitamin K3) Induces Apoptosis of Human Oral Cancer Cells and Reduces their Metastatic

Potential by Modulating the Expression of Epithelial to Mesenchymal

Transition Markers and Inhibiting Migration. Asian Pacific Journal of Cancer

Prevention, 14(9), 5461-5465. doi:10.7314/apjcp.2013.14.9.5461

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