

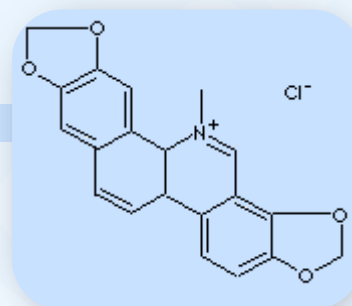
SANGUINARINE CHLORIDE

SYNONYMS

Sanguinarium chloride; Sanguinarine hydrochloride; Viadent; Dimethylenedioxy benzphenanthridine chloride; 13-Methyl-(1,3)Benzodioxolo(5,6-c)-1,3-dioxolo(4,5-i)phenanthridinium chloride;

PRODUCT IDENTIFICATION

CAS RN	5578-73-4, 2447-54-3(parent)
EINECS RN	219-503-3(parent)
FORMULA	C ₂₀ H ₁₄ ClNO ₄
MOL WEIGHT	367.78



PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	white to off-white powder
MELTING POINT	278 - 279 C
BOILING POINT	
DENSITY	
SOLUBILITY IN WATER	
pH	
VAPOR DENSITY	
REFRACTIVE INDEX	
FLASH POINT	

GENERAL DESCRIPTION

Sanguinarine is an antimicrobial used in mouthwashes and toothpaste to guard against inflammation brought on by gingivitis. It has also been found to protect against skin cancer by enhancing the production of proteins that induce the death of cells damaged by UV-B radiation. (source: <http://portal.acs.org/>)

Sanguinarine, a component of sanguinaria extract, was investigated for anti-plaque activity and retention in the oral cavity. Oral rinses containing sanguinaria extract showed antiplaque activity in humans. Uptake and retention levels of sanguinarine in plaque and saliva were determined by high-pressure liquid chromatography and sanguinarine levels in plaque were higher than in vitro minimum inhibitory concentrations against oral aerobic and anaerobic bacteria. Further, sanguinarine was able to disclose plaque with the aid of long-wave ultraviolet light and was retained longer than erythrosine and sodium fluorescein as shown by measurement of plaque area. It was concluded that sanguinarine has a high specificity and retention in dental plaque. The plaque-retentive properties in combination with antimicrobial action may be responsible for its clinical anti-plaque efficacy. (source: <http://jada.ada.org/>)

STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions.
INCOMPATIBLE MATERIALS	Strong oxidizing agents.
DECOMPOSITION PRODUCTS	Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride
POLYMERIZATION	Will not occur

SAFETY

HAZARD NOTES	Harmful. Harmful if swallowed.
EYE	May cause eye irritation.
SKIN	May cause skin irritation. May be harmful if absorbed through the skin.



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INGESTION	Harmful if swallowed.
INHALATION	May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
CHRONIC NFPA RATING	Health: 1, flammability: 0, reactivity: 0

SALES SPECIFICATION

APPEARANCE	white to off-white crystalline powder
ASSAY	98.0% min
OPTICAL ROTATION	+20° ~ +25°

TRANSPORT & REGULATORY INFORMATION

UN NO.	
HAZARD CLASS	
PACKING GROUP	
HAZARD SYMBOL	XN
RISK PHRASES	22
SAFETY PHRASES	36

PACKING

PRICE

