

## Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien T. +43(0)1 489 3961-0 F. +43(0)1 489 3961-7 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **PRODUCT** INFORMATION



#### Chamazulene

Item No. 36072

CAC Desister New 500 OF 5

CAS Registry No.:	529-05-5
Formal Name:	7-ethyl-1,4-dimethyl-azulene /
Synonym:	Dimethulene
MF:	C <sub>14</sub> H <sub>16</sub>
FW:	
Purity:	≥98%
UV/Vis.:	λ <sub>max</sub> : 245, 285, 289 nm
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years
Item Origin:	Natural/Source unknown
Information represents	the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

Chamazulene is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. A stock solution may be made by dissoving the chamazulene in the solvent of choice. Chamazulene is soluble in DMSO. It is also slightly soluble in water.

#### Description

Chamazulene is a terpene that has been found in chamomile (M. recutita) flowers and has anti-inflammatory and antioxidant activities.<sup>1</sup> It reduces increases in matrix metalloproteinase-3 (MMP-3), MMP-9, COX-2, inducible nitric oxide synthase (iNOS), and p65 NF-κB levels in IL-1β-stimulated primary rat chondrocytes when used at a concentration of 10  $\mu$ g/ml. Chamazulene (10 and 20  $\mu$ g/ml) reduces IL-1 $\beta$ -induced production of malondialdehyde (MDA) and increases levels of superoxide dismutase (SOD), catalase, and glutathione peroxidase (GPX) in primary rat chondrocytes. In vivo, chamazulene (25 and 50 mg/kg) reduces hind paw volume, serum levels of MDA, TNF- $\alpha$ , and IL-6, and cartilage erosion in a rat model of osteoarthritis induced by complete Freund's adjuvant (CFA).

#### Reference

1. Ma, D., He, J., and He, D. Chamazulene reverses osteoarthritic inflammation through regulation of matrix metalloproteinases (MMPs) and NF-kß pathway in in-vitro and in-vivo models. Biosci. Biotechol. Biochem. 84(2), 402-410 (2020).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/21/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM