

Caffeic acid phenethyl ester (CAPE) PRODUCT DATA SHEET

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Product Name: Caffeic acid phenethyl ester (CAPE)

Product Number: C155

CAS Number: 104594-70-9

Molecular Formula: $C_{17}H_{16}O_4$

Molecular Weight: 284.31

Appearance: Off-white crystalline powder

Water Content (Karl

Fischer):

Not more than 0.2%

Melting Point: 120 - 135°C

Storage Conditions: -20°C

Description: Caffeic acid phenethyl ester is a natural phenolic compound from honeybee

hives and has demonstrated anti-carcinogenic, anti-bacterial, and

antiinflammatory properties.

Mechanism of Action: Caffeic acid phenethyl ester inhibits bacterial growth by the production of

reactive oxygen species (ROS) which disrupt the cell's outer membrane. Antiinflammatory effects of CAPE arise from inhibiting the release of arachidonic acid from the cell membrane as well as inhibition of COX-1 and COX-2

activity.

Spectrum: Caffeic acid phenethyl ester is active against *Enterococcus faecalis*, *Listeria*

monocytogenes, Staphylococcus aureus, and Haemophilus influenzae.

References: Murtaza, Ghulam, Sabiha Karim, Muhammad Rouf Akram, Shujaat Ali Khan,

Saira Azhar, Amara Mumtaz, and Muhammad Hassham Hassan Bin Asad. "Caffeic Acid Phenethyl Ester and Therapeutic Potentials." BioMed Research

International 2014 (2014): 1-9. Web.

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