CM-Naringenin-Chalcone
Shown to visibly reduce signs of rosacea
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A Polyphenol for Reducing Visible Signs of Rosacea
Carboxy-Methyl (CM)-Naringenin-Chalcone is a single substance derived from the polyphenol naringenin chalcone, which naturally occurs in the peel of citrus fruits and tomato skin.

Naringenin chalcone was reported in the literature to have potent anti-allergic and anti-inflammatory properties. Based on this information Mibelle Biochemistry developed a modified CM-Naringenin-Chalcone, a new compound with improved stability and water solubility. The new molecule was studied for its beneficial effects on skin conditions with signs of rosacea.

Recent research reveals that an overproduction of the antimicrobial peptide cathelicidin LL37 in keratinocytes plays a major role in the development of this inflammatory skin disorder. LL-37 induces the release of pro-inflammatory mediators, which lead to inflammatory reactions in the skin. In an in-vitro study CM-Naringenin-Chalcone was shown to reduce the release of LL-37 induced pro-inflammatory cytokines in human keratinocytes. Furthermore, a placebo-controlled clinical study performed on female Caucasian volunteers with mild rosacea confirmed a measurable reduction in capillary blood flow and a visible diminution of rosacea redness after 56 days of treatment.

Thus, CM-Naringenin-Chalcone is a promising new cosmetic active ingredient appropriate to treat irritated skin such as in rosacea.

Claim Ideas for CM-Naringenin-Chalcone
• Visibly reduces redness in sensitive skin
• Protects and comforts stressed skin
• Down-regulates pro-inflammatory mediators

Applications
• Skin care for sensitive skin
• Anti-redness formulation
• Calming formulations for irritated skin

Formulating with CM-Naringenin-Chalcone
• Recommended use level: 0.1%
• Incorporation: CM-Naringenin-Chalcone can be formulated in emulsions (O/W, W/O) and gels. For cold processes, dissolve CM-Naringenin-Chalcone in the aqueous phase. In cold/hot processes add pre-dissolved during the cooling phase below 40°C.
• Thermostability: Homogenization and temperatures of up to 60°C over a short time do not affect the stability of CM-Naringenin-Chalcone. Water-solubility is strongly pH dependent (decreasing < pH 5)
• Remarks: Shield the product from light where possible.

INCI/CTFA-Declaration
Tetrasodium Tetracarboxymethyl Naringeninchalcone (and) Aqua/Water

CM-Naringenin-Chalcone

Chemical Structure of CM-Naringenin-Chalcone (sodium salt)

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