

an innovative solution to support healthy joint function

description

Celadrin^{*} esterified fatty acid complex (EFAC) is a blend of cetylated fatty acid esters and other active synergistic compounds. The manufacturing process is highly specific to produce a compound that has a narrow range for each EFAC within the blend. The esterification process ensures the fatty acids are stable and reduces the potential for reacting with oxygen. Celadrin^{*} EFAC helps to reduce joint discomfort and help maintain healthy joint function. Healthy joint function is a key indicator of quality of life among populations with mobility challenges.

key features and benefits[†]

- Celadrin* EFAC has been studied since 2002 and multiple clinical trials have shown its effectiveness.
- Celadrin^{*} EFAC, when given orally^a, has been shown to:

improve knee range of motion and overall function¹

achieve significant improvements in functional self-efficacy coupled with significant reduction in knee discomfort²

• Celadrin[•] EFAC, when applied topically, has been shown to:

significantly reduce discomfort within 30 minutes³⁻⁵

significantly improve functional performance and postural stability, with continued improvement throughout the 30-day study³⁻⁵

- cetylated fatty acid esters, when applied topically, have been found to effectively reduce neck discomfort when combined with physical therapy²
- additionally, cetylated fatty acid complexes have been used to assist canines with joint health challenges⁶

 [†] These statements have not been approved by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.
◊Clinical study used a fish oil blend and soy lecithin, in addition to the Celadrin*.
°Celadrin* EFAC is not approved for oral use in Europe.

* Trademark owned by a third party.



advantages[†]

- flexible formulation and route of administration options
- can be applied topically
- can be taken orally^a
- vegetarian options available
- non-GMO options available

Finished goods manufacturers should review applicable local regulatory requirements and/or consult local regulatory agencies to ensure compliance.^a

recommended topical dosage

Approximately 10.5% Celadrin* EFAC 75% (in cream) per application x 2 applications per day^{4,5}

recommended oral^a dosage

4 x 400 mg Celadrin* SD Powder 52% in hard-shelled capsules per day⁷ (equivalent to 832 mg of esterified fatty acid carbons)

 $6 \ x \ 350 \ mg$ Celadrin* EFAC 75% in soft gelatin capsules per day $^{1,\circ}$ (equivalent to 1575 mg of esterified fatty acid carbons)

product safety

There are animal-derived and vegetarian options available. Celadrin^{*} EFAC is derived from bovine tallow or from palm oil. No clinically significant, adverse or seriously adverse events were observed during clinical trials and toxicity studies.⁶⁻⁸





product forms

Celadrin* SD Powder 52%:

- o spray dried, off-white free-flowing powder
- sourced from bovine tallow
- contains 52% Celadrin[®] oil (100% EFAC), 33.5% maltodextrin, 14.5% gum Arabic
- packaged in polyethylene bags and fiber drums

Celadrin^{*} Oil 75% EFAC:

- o tan, waxy solid
- sourced from bovine tallow
- contains 75% Celadrin^{*} oil (Bovine fatty acids are derived from animals from USA and Mexico), 25%
 Olive pomace oil, 0.1% Fortium MTD-10 (antioxidant)
- packaged in 10-gallon high density polyethylene drums

Celadrin^{*} VEGE 52% SD Powder:

- o spray dried, off-white free-flowing powder
- non-GMO and non-irradiated
- free from milk, egg, fish, shellfish, tree nuts, peanuts, wheat/gluten, and soy
- sourced from palm oil and/or palm kernel oil derived from the palm fruit Elaeis guineensis
- contains 52% Celadrin* (100% VEGE EFAC), 33.5% maltodextrin, 14.5% gum Arabic
- packaged in 25 kg fiber drums with double poly liner

Celadrin* VEGE Oil 75% EFAC:

- o tan, waxy solid
- sourced from palm oil and/or palm kernel oil derived from the palm fruit *Elais guineensis*
- contains 75% VEGE Celadrin^{*} Oil, 25% Olive pomace oil, 0.1% Fortium MTD-10 (antioxidant)
- packaged in 10-gallon high density polyethylene drums
- ¹ Hesslink R, Armstrong D, Nagendran MV, Sreevatsan S, Barathur R. The Journal of Rheumatology, 2002; 29:1708-12.
- ² Sharan D, Jacob BN, Ajeesh PS, Bookout JB, Barathur RR. J Bodywork Movement Ther 2011;15:363-374.
- ³ Kraemer WJ, Ratamess NA, Maresh CM, Anderson JA, Volek JS, Tiberio DP et al. J Strength Cond Res 2005; 19(2):475-480.
- ⁴ Kraemer WJ, Ratamess NA, Maresh CM, Anderson JA, Tiberio DP, Joyce ME et al. J Strength Cond Res 2005; 19(1): 115-121.
- ⁵ Kraemer WJ, Ratamess NA, Anderson JM, Maresh CM, Tiberio DP, Joyce ME et al. J Rheumatol 2004;31(4):767-774.
- ⁶ Hesslink R, Sprouse S. Internal study.
- $^{\rm 7}$ $\,$ Udani JK, Singh B, Torreliza M, Crabtree M, Zhang G. Unpublished data.
- ⁸ Perry Scientific Acute Toxicity Study 00-1075. 2001. Prepared for Imagenetix, Inc.



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