

Specification : Rose-colored Leadwort Whole Plant Extract/

สารสกัดต้นเจตมูลเพลิงแดง (Manose RM-0126)

(Application : An active ingredient for analgesic and anti-inflammatory cosmetics/

สารสำคัญในผลิตภัณฑ์เครื่องสำอางแก้ปวดและต้านการอักเสบ)

1. Name of the raw material : Rose-colored Leadwort Whole Plant Extract
2. Active components : Alkaloids, flavonoids, saponins, glycosides, tannins, naphthoquinones and plumbagin⁽¹⁾
3. Common and scientific name/ Family of the plant : Rose-colored Leadwort (*Plumbago indica* L.)/
PLUMBAGINACEAE
4. Physical appearance : Reddish-brown solid with herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using plumbagin as a marker
7. Stability of active constituent : Plumbagin is stable at room temperature and light protection condition
8. Solubility : Soluble in water and ethanol
9. Microbial contamination : No pathogenic microorganism with less than 1,000 cfu/g of the total plate count of bacteria, yeast and fungi which is conformed to the Thai FDA regulation
10. Biological activities : Anti-oxidant⁽¹⁾, analgesic⁽²⁾, anti-inflammatory⁽¹⁾, anti-microbial⁽¹⁾, anti-fungal⁽¹⁾, anti-acne⁽¹⁾ and anti-cancer⁽¹⁾ activity
11. Animal / human performance test : Analgesic activity in animals⁽²⁾
12. Safety : No skin irritation in human volunteers / LD₅₀ > 5 g/kg BW in rats

-
- | | | |
|--|---|--|
| 13. Pharmaceutical, food supplement or cosmetic applications | : | Analgesic, anti-inflammatory, anti-oxidant, anti-microbial, anti-fungal and anti-acne in cosmetics/
Anti-cancer in food supplements |
| 14. Recommended concentrations in the product | : | 0.1-1.0% w/w in cosmetics and food supplements |
| 15. Storage | : | Keep in tight and light protection container at room temperature |
| 16. Precautions | : | None |
| 17. Cost per kg | : | Please request |

References

1. Khatun A. (2023) *Plumbago indica* L.: A review of its medicinal uses, phytochemistry, pharmacology, and toxicology. **International Journal of Herbal Medicine**. 11(4): 31-37.
2. Paul S, Saha D. (2012) Analgesic activity of methanol extract of *Plumbago indica* (L.) by acetic acid-induced writhing method. **Asian Journal of Pharmacy and Technology**. 2(2): 74-76.
3. Manose In-house Project “The Development of Extracts from Thai Medicinal Plants for Analgesic and Anti-Inflammatory”, **Manose Health and Beauty Research Center** (www.manose.co), unpublished, 2020.