

Specification : Manose-AI-LAM-007-045/896 Extract/ สารสกัดมาโนเซเอไอ-  
แอลเอเอ็ม-007-045/896 (Manose RM-0106)

(Application : An active ingredient for anti-inflammatory food supplements/  
สารสำคัญในผลิตภัณฑ์เสริมอาหารต้านการอักเสบ)

1. Name of the raw material : Manose-AI-LAM-007-045/896 Extract
2. Active components : Essential oils, phenolic compounds, flavonoids, alkaloids, glycosides, saponins, steroids, terpenoids, tannins and gingerol<sup>(1)</sup>
3. Common and scientific name/ Family of the plant : Ginger (Rhizome) (*Zingiber officinale* Roscoe)/ ZINGIBERACEAE
4. Physical appearance : Dark brown solid with herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using gingerol as a marker
7. Stability of active constituent : Gingerol 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-inflammatory activity<sup>(2)</sup>
11. Animal / human performance test : Anti-inflammatory activity in animals<sup>(2)</sup>
  - Anti-inflammatory activity in rats by the hind paw edema assay of 1.4 times in male rats and 1.2 times in female rats more active than prednisolone when taken orally
12. Safety : No skin irritation in human volunteers / LD<sub>50</sub> > 5 g/kg BW in rats

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- 13. Pharmaceutical, food supplement or cosmetic applications : Anti-inflammatory in food supplements
  - 14. Recommended concentrations in the product : 0.1-1.0% w/w in food supplements
  - 15. Storage : Keep in tight and light protection container at room temperature
  - 16. Precautions : -
  - 17. Cost per kg : Please request

#### References

1. Dhanik J, Arya N, Nand V. (2017) A review of *Zingiber officinale*. **Journal of Pharmacognosy and Phytochemistry**. 6(3): 174-184.
2. Manose In-house Project “The Development of Extracts from Thai Medicinal Plants for Anti-Inflammatory”, **Manose Health and Beauty Research Center** (www.manose.co), unpublished, 2015.