

Specification : Date Extract mixed with diluents /

สารสกัดอินทผลัมผสมสารตัวเติม (Manose RM-0054)

(Application : An active ingredient for foods / drinks and food supplements

for immunomodulating / anti-aging and rejuvenation activities /

สารสำคัญในเครื่องดื่ม ผลิตภัณฑ์อาหารและเสริมอาหารเพื่อเสริมภูมิคุ้มกัน

และชะลอวัย / อายุวัฒนะ)

1. Name of the raw material : Date Extract mixed with diluents
2. Active components : Dates extracts mixed with diluents such as sorbitol, lactose, isomalt and cyclodextrin at the ratios of 1 : 5 to 1 : 10 w/w
3. Common and scientific name/ Family of the plant : Dates (*Phoenix dactylifera* L.) / PALMAE
4. Physical appearance : Light yellowish white dried powder with specific herbal odor and sweet taste
5. pH : 5.5 - 7.0
6. Standardization : HPLC fingerprint using gallic acid as a marker
7. Solubility : Soluble in hot water (100 °C) and cold water at room temperature (25 °C)
8. 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
9. Biological activities : Anti-oxidative<sup>(1)</sup>, blood lipid-lowering<sup>(2)</sup> and estrogen stimulation activities

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ผู้นำระดับนานาชาติในการวิจัยและพัฒนาผลิตภัณฑ์ธรรมชาติ

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10. **Animal / human performance test** : Anti-oxidative and blood lipid-lowering activities in human volunteers<sup>(2)</sup>
11. **Safety** : No skin irritation in human volunteers / LD<sub>50</sub> > 5 g/kg BW in rat
12. **Pharmaceutical, food supplement or cosmetic applications** : Food and drink products / food supplements
13. **Recommended concentrations in the product** : 5 - 10 % w/w (for foods / drinks and food supplements for immunomodulating /anti-aging and rejuvenation activities)
14. **Storage** : Keep in tight and light protection container at room temperature
15. **Precautions** : None
16. **Cost per kg** : Please request

**References**

1. Vayalil PK. (2002) Antioxidant and antimutagenic properties of aqueous extract of date fruit (*Phoenix dactylifera* L. Arecaceae). **Journal of Agricultural and Food Chemistry**. 50: 610-617
2. Rock W, Rosenblat M, Borochoy-Neori H, Volkova N, Judeinstein S, Elias M, Aviram M. (2009) Effects of date (*Phoenix dactylifera* L., Medjool or Hallawi Variety) consumption by healthy subjects on serum glucose and lipid levels and on serum oxidative status: A pilot study. **Journal of Agricultural and Food Chemistry**. 57: 8010–8017