

Specification : Sorghum extract / สารสกัดข้าวฟ่าง

(Manose RM-0029)

(Application : An active ingredient for Anti-wrinkle cosmetic products and food supplement products for diabetic and dyslipidemia patients / สารสำคัญในผลิตภัณฑ์เครื่องสำอางต้านริ้วรอย และเป็นผลิตภัณฑ์เสริมอาหาร สำหรับผู้ป่วยเบาหวาน และผู้ป่วยไขมันในเลือดสูง)

1. Name of the raw material : Sorghum extract
2. Active components : Alkaloids, phenolic compounds and flavonoids<sup>(1)</sup>
3. Common and scientific name/ Family of the plant : Sorghum (*Setaria italica* (L.) P.Beauv)/ GRAMINEAE
4. Physical appearance : Brown-yellowish with specific herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using flavonoids as a marker
7. Solubility : Soluble in ethanol

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-oxidant<sup>(1)</sup>, blood glucose and serum lipid reduction<sup>(2)</sup>
10. Animal / human performance test : Blood glucose and serum lipid reduction in human volunteers<sup>(2)</sup>
11. Safety : No skin irritation in human volunteers
12. Pharmaceutical, food supplement or cosmetic applications : Anti-wrinkle cosmetic products and food supplement products for diabetic and dyslipidemia patients
13. Recommended concentrations in the product : 0.1-5 % w/w
14. Storage : Keep in tight and light protection container at room temperature
15. Precautions : None

16. Cost per kg : Please request

## Reference

1. Suma PF, Urooj A. (2012) Antioxidant activity of extracts from foxtail millet (*Setaria italica*). **Journal of Food Science and Technology**. 49(4): 500-504
2. Sireesha Y, Kasetti RB, Nabi SA, Swapna S, Apparao C. (2011). Antihyperglycemic and hypolipidemic activities of *Setaria italica* seeds in STZ diabetic rats. **Pathophysiology**. 18: 159-164