PECAN NUT EXTRACT

PW(powder-type), BG(liquid-type)

[Cosmetic Raw Material]

NOF CORPORATION Oleo & Speciality Chemicals Div.

Pecan nut shell derived powder contain a high proportion of polyphenol

- The pecan (Carya illinoensis), a member of the Juglandaceae family, is one of the more prominent commercial tree species in North America. The most widely known product of the pecan tree is the popular pecan nuts. Pecan nuts are a major food source to the Native Americans.
- PECAN NUT EXTRACT PW, a flavonoid extracted from the shell of pecan nuts with boiling water, is a extract in powder form.



- Concentrated Multifunctional Polyphenol Powder
 Function as active oxygen elimination, antioxidative activity on autoxidation, odor eliminator.
- Antiallergic-like action (suppression of basophil degranulation)
 PECAN NUT EXTRACT PW suppress the degranulation of rat basophlic leukemia (RBL) line.



2 Information / Safety Data / Specification

Information

Product Name: PECAN NUT EXTRACT PW INCI Name: CARYA ILLINOENSIS (PECAN)

SHELL EXTRACT

Safety Data

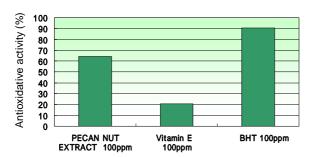
- 1. Acute oral toxicity. 2. Primary skin irritation.
- 3. Cumulative application. 4. Skin sensitization.
- 5. Phototoxicity. 6. Photosensitization. 7. Ocular irritation.
- 8. Reverse Mutation Testing using Microorganisms.
- 9. Chromosomal aberration testing using cultured mammalian cells. 10. Micronucleus testing.

Specification

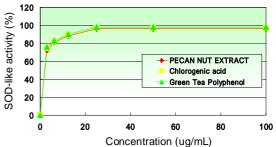
Items	Specifications	Test Methods
Description	Red brown to brown powder. slightly characteristic odor.	Sensory evaluation
Identification (polyphenols)	More than 30 %	NOF Original Test
Heavy metals	Not more than 20 ppm	JSQI (Method 2, 1.0g)
Arsenic	Not more than 2 ppm	JSQI (Method 3, 1.0g)
рН	4.5 ~ 6.5	JSQI (1 % aq.)
Loss on Drying	Not more than 15%	JSQI (2.0g, 105 , 4h)

3 Experimental Data

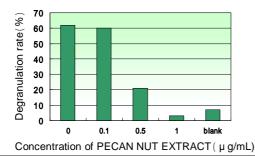
Antioxidative activity on autoxidation of linoleic acid



 Active oxygen elimination assay (SOD-like activity)



Suppression of basophil degranulation



Odor eliminating

