

Fucoxanthin, also known as brown algae pigment, is extracted from kelp (*Laminaria Japonica*). It is a valuable component of brown algae, possessing excellent antioxidant properties and free radical scavenging abilities. Fucoxanthin has an inherently unstable 5,6-epoxide structure, making it susceptible to attack by nucleophilic molecules, leading to oxidation.

Translab FUXII[®] high-stability fucoxanthin, it has been utilized special processing techniques to effectively address the instability issue in its structure. FUXII[®] HS fucoxanthin exhibits the excellent stability and can effectively deliver its functional benefits.

It is marketed under the trademark FUXII[®] or Translab FUXII[®] HS Fucoxanthin EX

- High stability: Can be stored at room temperature while maintaining activity.
- High water solubility: Highly soluble in water and does not easily clump.
- Porous structure: The second-generation high-stability fucoxanthin can be conjugated onto carriers, forming a porous structure to increase surface area and enhance activity.



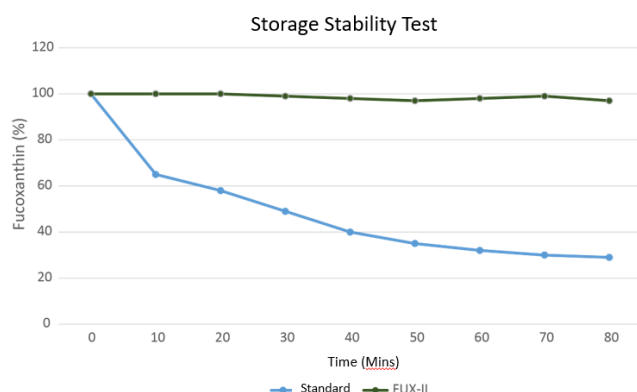
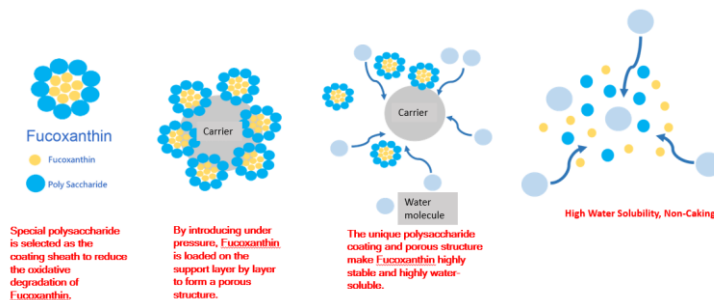
Updated: 01 July 2024 Version 2.0

INFORMATION ABOUT THE INGREDIENT

What is Fucoxanthin ?

- **Molecular weight: 658.9 Da**
- **The most abundant carotenoid in Phaeophyta organisms**
- **Widely found in various algae and marine phytoplankton, mainly involved in photosynthesis and light energy transfer**
- **Also known as fucoxanthin, phycoxanthin**
- **6Kg of wet brown algae contains an average of 0.1g Fucoxanthin**

High Stability Fucoxanthin (FUX II) Porous Structure Technology



- Exclusive patented technology
- High safety
- Water soluble
- Hydrolysis extraction technology
- Ultra-pressure filtration
- Porous and high permeability
- Activity increased by 300%



HEALTH BENEFITS & CLINICAL APPLIATION

- ✓ **Improve abnormal fat metabolism (Obesity & weight management)**
- ✓ **Cognitive function & gaming performance**
- ✓ **Healthy Aging**
- ✓ **Metabolic syndrome, insulin sensitivity and insulin secretion**
- ✓ **Regulate high blood sugar (Diabetes)**
- ✓ **Improve cardiovascular disease (Heart disease)**
- ✓ **Delay kidney disease (Kidney disease)**

HS Fucoxanthin (FUX II)



Translab FUXII[®] HS Fucoxanthin EX/ Powder (Technical Data)

Appearance: Light brown powder
Flavor: No odor, slight seaweed taste
Botanical origin: Saccharina Japonica
Fucoxanthin (UV) : >10%
Total Polysaccharide: >60%
Inorganic Arsenic (As) : <1ppm
Packaging: 2 kg/pack; 10kg/Carton
Shelf Life: 2 years
Heat & Stability: 100 °C (1 hour) ; 121 °C (30 mins)

Safety & Quality Testing : Every lot of production
Suggest Use & Suitable for: 500mg -1.0 g/day
Adjuvant Functional Support for Medical Purpose : 1.5g/day
*Consult with professional dietitian or physician

Application: FUXII[®] HS Fucoxanthin EX / Powder is versatile and easy to use as a dietary intake health ingredient. Product form as capsules, tablets, sachets powder & beverage drink. Suitable for all kinds of health supplement, functional drink & nutritional formulation products

ANALYSIS

Item	Specification	Methods
Appearance	Light Brown Powder	Visual
Fucoxanthin (UV)	≥ 10 %	UV
Polyphenols (UV)	≥ 5 %	UV
Water soluble polysaccharides	≥ 60%	UV-VIS
Water solubility ratio	≥ 98%	AOAC
Thickness	< 80mesh	AOAC
Moisture	≤ 5.0%	AOAC
Ash	≤ 5.0%	AOAC
Odour and Taste	Odorless and Bland Taste	Sensory Analysis
Heavy metal-Inorganic As	≤ 1ppm	ICP-OES
Heavy metal-Pb	≤ 1ppm	ICP-OES
Heavy metal-Hg	≤ 1ppm	ICP-OES
Heavy metal-Cd	≤ 1ppm	ICP-OES
Total plate count (CFU/ml)	< 1000 CFU/ml	AOAC
Coliform	≤ 1000 MPN/g	AOAC
Escherichia coli	Negative	AOAC
Yeast	≤ 100 cfu/g	AOAC
Mold	≤ 10 cfu/g	AOAC
Salmonella spp.	Negative	AOAC
Pharmaceutical adulterants (365)	Negative	LC/MS/MS
Conclusion	PASS	

PACKAGING AND STORAGE

Packaging		Storage	
Primary	N.W. 2KG / Bag / Aluminum pack 10Kg per carton size:(54.0x34.0x40.0)cm	Shelf life	2 years
Secondary	Cardboard box	Storage conditions	At room temperature Protect from light, heat and humidity Keep closed in its original pack

DESIGNATIONS

Export				
	Korea	China	South East Asia	USA
Accredited: yes/no	yes	yes	yes	Yes
Under name	FUXII [®] HS Fucoxanthin Extract	FUXII [®] Saccharina japonica Powder	FUXII [®] Saccharina Japonica Extract	FUXII [®] HS Fucoxanthin Extract



The information provided is given in good faith and is based on the material available data at the time.
For further information, please see the M.S.D.S.

END