

Technical Data Sheet

Product Name: Biomax™ Astaxanthin 5% CWS

Trade Brand: SmartHerb

Technical Data Sheet			
AC Code	BM082101a	CAS number	Astaxanthin
Molecular formula	472-61-7	Molecular weight	596.84
Origin	China	Source	Haematococcus pluvialis
Item	Standard		Analysis Method
Appearance	Dark-red powder		Visual
Odor & Taste	No other smell		Organoleptic
Typical Analysis			
Astaxanthin	NLT 5.0%		HPLC
Loss on drying	NMT 7.0%		Ph. Eur. 2.2.32
Bulk Density	0.4~0.8 g/mL		Ph. Eur. 2.4.16
Heavy metals			
Lead (Pb)	NMT 1.0 mg/kg		ICP-MS
Arsenic (As)	NMT 1.0 mg/kg		ICP-MS
Cadmium (Cd)	NMT 1.0 mg/kg		ICP-MS
Mercury (Hg)	NMT 0.1 mg/kg		ICP-MS
Microorganism			
Total Plate Count	NMT1000 CFU/g		Ph. Eur. 2.6.12
Yeast & Mold	NMT100 CFU/g		Ph. Eur. 2.6.12
Salmonella	Absent/25 g		Ph. Eur. 2.6.13
E. coli	LT10 CFU/g		Ph. Eur. 2.6.13
Staphylococcus aureus	Absent/25 g		Ph. Eur. 2.6.13
Package	25kgs		
Shelf life	24 Months		
Storage	Store in tightly closed containers at room temperature. Protected from moisture and pest infestation.		

INGREDIENTS

An ingredient is defined in Directive 2000/13/EC on labelling: "ingredient means any substance including additives, used in the production or preparation of a foodstuff and still present in the finished product although possibly in a modified form" i.e all raw materials to produce the goods.

Please list all ingredients:

Ingredients/material composition	%	Country of origin
Astaxanthin	≥5%	China
Modified Starch	≤30%	China
White Granulated Sugar	≤5%	China
Maltodextrin	≤24%	China
Corn Starch	≤35%	China
Antioxidant	≤1%	China

ORIGIN

Country of origin of the product::China			
Is a manufacturing process available	☒ YES		☐ NO
Source of the product:	☐ Animal ☒ Plant ☐ Mineral origin ☐ Synthetic ☐ Biotechnological processing		
please answer the following questions.			
Starting material:	Haematococcus pluvialis	Origin:	China

GENETICALLY MODIFIED ORGANISMS-GMO

According to EU regulations EC/1829/2003 & EC/1830/2003

According to the EU regulations concerning the traceability and labelling of Genetically Modified Organisms (GMO), and the traceability of food products produced from GMO, we confirm that the product:

Contains ingredient(s) from Maize and/or Soya origin	☐ YES	☒ NO
Contains no material which contains, consists of or is produced from authorized GMOs in proportion higher than 0,9%. This presence is adventitious or technically unavoidable	☒ YES	☐ NO
is GMO or contains or consists of GMOs	☐ YES	☒ NO
is produced from GMOs or contains ingredients produced from GMOs	☐ YES	☒ NO
Contains ingredient(s) from other potential GMO-risk raw material(s) (rice, beet, cotton ...)	☐ YES	☒ NO
If Yes, please specify: o ingredient: o vegetable origin: o geographic origin:		
Contains no material which contains, consists of or is produced from evaluated GMOs in proportion higher than 0,5%. This presence is adventitious or technically unavoidable	☒ YES	☐ NO
For information about processing aids, is produced or contains ingredient(s) produced	☐ YES	☒ NO

with GMOs or Genetically Modified Microorganisms processing aids (bacteria, yeast... or derived from GMOs or GMMs (including enzymes))		
If yes, please specify:		
We confirm that the ingredient supplied is compliant in all respects with the Regulations N° 1829/2003/EC and N° 1830/2003/EC where applicable	☒ YES	☐ NO

SUBSTANCES OR PRODUCTS CAUSING ALLERGIES OR INTOLERANCES

According to Regulation (EU) No. 1169/2011 as regards of ingredients present in foodstuffs

Allergenic substances (Regulation EU 1169/2011 – Annex II)	Present in finished product	Present in the manufacturing site	Present on the same manufacturing line	Possible cross-contamination
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains)	NO	NO	NO	NO
Crustaceans and products thereof	NO	NO	NO	NO
Eggs and products thereof	NO	NO	NO	NO
Fish and products thereof	NO	NO	NO	NO
Peanuts and products thereof	NO	NO	NO	NO
Soybeans and products thereof	NO	NO	NO	NO
Milk and products thereof (including lactose)	NO	NO	NO	NO
Nuts (almond, hazelnut, walnut, cashew, pecan nut, Brazil nut, pistachio nut, macadamia nut)	NO	NO	NO	NO
Celery and products thereof	NO	NO	NO	NO
Mustard and products thereof	NO	NO	NO	NO
Sesame seeds and products thereof	NO	NO	NO	NO
Sulphur dioxide and sulphites (>10 mg/kg or 10 mg/L expressed as SO ₂)	NO	NO	NO	NO
Lupin and products thereof	NO	NO	NO	NO
Molluscs and products thereof	NO	NO	NO	NO

NON IRRADIATION

According to UE Directive No. 1999/2/CE

Has this raw material or one of its ingredients been irradiated or ionised	☐ YES	☒ NO
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We confirm above non-irradiation statement is available	☒ YES
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NANOMATERIAL

According to Regulation(EU)No 1169/2011

Does this raw material contain or can be considered asengineered nanomaterial	☐ YES	☒ NO
Does this raw material have been made with nanotechnology?	☐ YES	☒ NO
Does the product contain nanotechnology as defined by the French decree no.2012-232?	☐ YES	☒ NO

WADA Anti-Doping Statement

Current WADA Prohibited List

Does the product contain any prohibited substances (hormones, anabolic agents, stimulants) listed on WADA Prohibited List?	☐ YES	☒ NO
Is there any risk of cross-contamination with WADA banned substances during production?	☐ YES	☒ NO

FOOD CERTIFICATE

Manufacturer's quality certificates:				
ISO 9001 ☐	HACCP ☐	ISO 14001 ☐	ISO 22000 ☐	☒ OTHER
Is the raw material Food Grade?	☒ YES	☐ NO		
Can the product be used in baby food(Directive 2006/141/CE)?	☐ YES	☒ NO		
Does the product comply with the UE Regulation No231/2012 about additives?	☒ YES	☐ NO		
Is the product complying with a Pharmacopeia monography?	☒ YES	☐ NO		
Is the product complying with the UE Regulation No.1334/2008 about flavourings?	☐ YES	☒ NO		
Was the product used in the European food industry before May 1997?	☒ YES	☐ NO		
If no,could you provide an authorisation (according to Regulation 258/97/EC)?	☐ YES	☐ NO		
Are stability studies available?	☒ YES	☐ NO		

CONTAMINANTS

Is the product conforming to UE regulations No 2023/915 setting maximum levels for certain contaminants in foodstuffs,as amended?		☒ YES	☐ NO
Contaminants	Tested?	Result	
Pesticides (multi-residue)?	Can be provide if need	Complies with EU 396/2005	
Dioxins and dioxin like PCBs?	Can be provide if need	Complies with EU 915/2023	
Heavy metals	Can be provide if need	Complies (≤10 ppm)	
PAHs(PAH4)	Can be provide if need	Complies with EU 915/2023	
Benzo[a]pyrens?	Can be provide if need	Complies with EU 915/2023	
Mycotoxins (Aflatoxins, OTA)	Can be provide if need	Complies with EU 915/2023	
3-MCPD	NO	Not applicable	
Doping like substances? http://list.wada-ama.org/	NO	Not applicable	

FOREIGN BODIES

Which material do you use in order to fight against the foreign bodies			
	Presence?	Test frequency	Where is it located on the process line?
Magnet	YES	Continuous	Raw material intake / processing line
Metal detector	YES	Each batch	Before packaging
Sieve	YES	Continuous	During processing
Filter	YES	Continuous	Extraction / filtration stage
X-ray detection	NO	N/A	N/A
Other(please specify)	NO	N/A	N/A

NUTRITIONAL VALUES

Nutritional Composition	☒ Per 100g	☐ Per serving
Energy(kJ/kcal)	1550	
Total Fat(g)	0.5	
Total Carbohydrate(g)	88.0	
Fibre(g)	1.5	
Protein(g)	2.0	
Salt(g)	0.025	
Vitamins:	0	
Minerals:	0	
Remarks: Nutrition Data are obtained by 3 rd party lab; tested on a yearly basis		

TRACEABILITY

Batch size	
Batch definition	A batch is defined as a homogeneous production lot produced under the same conditions
Signification of the batch number by an example	N/A
Marking method (labelling...)	N/A

PACKAGING

Is the packaging material approved as food grade according to regulations 1935/2004,10/2011 and 1282/2011?	☒ YES	☐ NO
Do you guarantee the packaging traceability according to regulation 1935/2004(art 17)?	☒ YES	☐ NO
Can you guarantee that the product and its packaging supplied to do not contain Phtalates?	☒ YES	☐ NO
Can you guarantee that the product and its packaging supplied to do not contain ITX? (A packaging contaminant:Isopropylthioxanthone(ITX)found in dairy products)	☒ YES	☐ NO
Can you guarantee that the product and its packaging supplied to do not contain BisphenolA(BPA)?	☒ YES	☐ NO

Do you add desiccant bags during packaging process? If so, where do you mention it:.....	☒ YES ☐ NO
Can you provide migration test in order to guarantee packaging safety?	☒ YES ☐ NO

Material Safety Data Sheet

Section 1 Identification of Substance			
Product Name:	Astaxanthin 5% CWS	Company:	SmartHerb Inc
Address:	Chengnan Road, Huaxi Subdistrict, Changxing County, Huzhou City, Zhejiang Province, 313100, China		
Section 2 Hazards Identification			
2.1 Classification of the substance or mixture: This product is not included in the List of Hazardous Chemicals.			
2.2 Health hazards: May cause skin allergic reaction.			
2.3 Fire and explosion danger: Noncombustible.			
2.4 Environmental hazards: This product is not allowed to be directly discharged into the environment.			
Section 3 Composition, Information on Ingredients			
Pure chemicals: Mixture			
Component	Content	CAS NO.	
Astaxanthin	≥5.0	472-61-7	
Section 4 First Aid Measures			
4.1 Skin contact: Remove contaminated clothes and rinse the skin thoroughly with soapy water and clean water. If necessary, seek medical advice.			
4.2 Eye contact: Immediately lift the eyelid and rinse thoroughly with running water for 15 minutes. If necessary, seek medical advice.			
4.3 Inhaled: Quick release from site to fresh air. Keep the airways open. Refer for medical attention.			
4.4 Swallowed: Rinse the mouth. no vomiting, and seek medical advice.			
Section 5 Fire-Fighting Measures			
5.1 Hazard characteristics: May decompose to produce toxic fumes when burned or exposed to high temperatures.			
5.2 Harmful combustion products: No data available.			
5.3 Fire extinguishing method: This product is flammable. Put out the fire with dry powder, foam or carbon dioxide extinguishing agent.			
Section 6 Accidental Release Measures			
6.1 Emergency handling: Collect the leakage in a closed container as much as possible.			
6.2 Human related safety protection measures: Absorb with sand, activated carbon or other inert materials and transfer to a safe place. It is recommended that emergency personnel wear breathing apparatus, protective clothing and rubber gloves. It is forbidden to contact or cross the leakage. Cut off the leakage source as far as possible. The warning area is designated according to the influence area of liquid flow, steam or dust diffusion.			
6.3 Environmental precautions: Unrelated persons from the side of the wind, upwind evacuation to a safe area. Disposing this product into the environment without permission of the local government is prohibited.			
Section 7 Handling and Storage			

7.1 Precautions for safe handling: Operators must be professionally trained and must strictly follow operating instructions. The operation and disposal shall be carried out in the place with local ventilation or comprehensive ventilation and ventilation facilities. See section 8 for individual protective measures. Keep away from fire and heat sources. Smoking is strictly prohibited in the workplace. If you need to be canned, you should control the flow rate and have a grounding device to prevent the accumulation of static electricity. Separate from oxidants chemicals; disinfectants or drugs. Mixed storage is not allowed (see Section 10 for incompatible materials)

7.2 Conditions for safe storage: This product should be sealed and stored with shading, sealed and kept in cold storage. The packaging should be stacked neatly and the stacking height should be less than 2m. Separate from oxidants chemicals; mixed storage is not allowed (see section 10 for incompatible materials.) Keep the container sealed. Keep away from heat. The storage area should be equipped with emergency leakage treatment equipment and appropriate shelter materials.

Section 8 Exposure Controls/Personal Protection

8.1 Appropriate engineering controls: Workplace recommendations are separate from other workplaces. Strengthen ventilation. Set up red area warning line, warning sign and Chinese warning description, and set up communication alarm system. Provide safe shower and eye washing equipment.

8.2 Respiratory protection: When the air concentration exceeds the standard, wear a filter gas mask (half mask) or protective masks.

8.3 Eye protection: Wear safety goggles.

8.4 Hand protection: Wear rubber oil resistant gloves.

8.5 Body protection: Wear anti-gas permeation overalls. Smoking, eating and drinking are prohibited at work, after work, clean it thoroughly.

8.6 Other protection: Smoking, eating and drinking are prohibited at work, after work, clean it thoroughly.

Section 9 Physical and Chemical Properties

9.1 Information on basic: No data available.

9.2 Physical and chemical properties: Dark red powder.

9.3 pH: No data available.

9.4 Boiling point (°C): No data available.

9.5 Solubility: No data available.

9.6 Melting point/freezing point: No data available.

9.7 Relative density: No data available.

Section 10 Stability and Reactivity

10.1 Chemical stability: No data available.

10.2 Prohibited substances: Strong oxide, strong acid, strong base.

10.3 Conditions to avoid: strong light, high heat, open fire, humidity, electrostatic discharge.

10.4 Polymerization harm: No data available.

10.5 Decomposition products: No data available.

Section 11 Toxicological Information

- 11.1 Acute toxicity: No data available.
- 11.2 Irritation: No data available.
- 11.3 Sensitization: No data available.
- 11.4 Mutagenicity: No data available.
- 11.5 Teratogenicity: No data available.
- 11.6 Carcinogenicity: No data available.

Section 12 Ecological Information

- 12.1 Ecological Toxicity: No data available.
- 12.2 Bio-accumulative potential: No data available.
- 12.3 Mobility in soil: No data available.

Section 13 Disposal Considerations

- 13.1 Waste chemicals: Waste generation should be avoided or minimized. Surplus products and unrecyclable products shall be disposed of by licensed waste disposal contractors.
- 13.2 Contaminated packaging: Return containers to the manufacturer or dispose the container in accordance with national and local regulations.
- 13.3 Discarded notices: Dispose according to national and local regulations. See section 8 for personal security precautions during waste disposal.

Section 14 Transport Information

- 14.1 Packaging method: Pack as instructed by the manufacturer. Matters of attention to transportation. Leakage and spill shall be prevented during transportation. Transport vehicles should be equipped with enough amount of proper fire-fighting equipment and equipment for emergency retardant. Use non-spark mechanical equipment and tools hands must be produced with fire retardant. The exhaust pipe of the vehicle carrying this products must be equipped with fire retardant. It is better to transport in the morning and evening in summer. Prevent overexposure to sunlight, rain and high temperature during transport. Keep from fire, heat and high temperature areas during stopovers. Dangerous signs and announcements shall be posted on the means of transport in accordance with the relevant transport requirements.

Section 15 Regulatory Informatio

- 15.1 Regulatory information: This safety data sheet complies with the requirements of Regulation (EC) No.1907/2006. Safety, health and environment regulations/legislation which regulates this substance or its mixture.
- 15.2 Chemical Safety Assessment
- 15.3 Control Law of Occupational Diseases of the PRC: Not comprised.
- 15.4 Catalogue of occupational hazards: Not comprised.
- 15.5 Regulations on safety management of hazardous chemicals: Not comprised.
- 15.6 Hazardous Chemicals Catalog: Not comprised.
- 15.7 List of explosive chemicals: Not comprised.
- 15.8 List of Hazardous Chemicals subject to Regulation: Not comprised.
- 15.9 Catalogue of varieties of narcotic drugs: Not comprised.



SmartHerb

Innovating Botanical Health

Address: Chengnan Road, Huaxi Subdistrict, Changxing
County, Huzhou City, Zhejiang Province, 313100, China

15.10 Environmental management measures for new chemicals: Not comprised .

15.11 List of toxic chemicals strictly restricted for import and export in China: Not comprised.

Section 16 Other Information

N/A



Flow Chart

