

Product Data Sheet

Product name: Chondroitin Sulphate Bovine 90% CPC HALAL
AC Code: AC05825b

1. Technical Data Sheet

| | | |
|--|--|------------------------------|
| CAS number | 9082-07-9 | |
| Compliance (Food/ Pharmacopoeia /FCC/Feed) | Food | |
| Source (animal, plant, mineral, petrochemical) | Animal | |
| Item | Standard | Analysis Method |
| Sensory | | |
| Appearance | White or almost white, hygroscopic powder | Visual |
| Typical Analysis | | |
| Chondroitin Content | Min 90% by CPC (Dry basis) | USP |
| Particle Size | 95% pass through sieve 80 mesh | US Standard Sieve |
| Water Solubility | Freely soluble in water, practically insoluble in acetone and in ethanol (96 per cent) | Enterprise Standard |
| Loss on drying | ≤ 12.0% | USP <731> Ph.Eur.2.2.32 |
| PH | 5.5 ~ 7.5 | USP <791> |
| Chloride | 0.5% Max | USP <221> |
| Sulfate | 0.24% Max | USP <221> |
| Protein | ≤ 6.0% | USP |
| Residue on ignition | 20% ~ 30% | USP <281> |
| Specific Rotation | -20°~ -30° | USP <781S> |
| Bulk Density | 0.55 - 0.64g/ml | Gravimetry |
| Tapped Density | 0.73 - 0.85g/ml | Gravimetry |
| Heavy Metals | | |
| Heavy metals | ≤ 10 ppm max | USP <231> II Ph.Eur.2.4.8 |
| Lead | ≤ 3.0 ppm | USP <251> Ph.Eur.2.4.10 |
| Arsenic | ≤ 1.0 ppm | USP <211> II Ph.Eur.2.4.2 |
| Cadmium | ≤ 1.0 ppm | USP <233> |
| Mercury | ≤ 0.1 ppm | USP <233> |
| Microorganism | | |
| Total Plate Count | ≤ 1,000 CFU/g | USP <2021> Ph.Eur.2.6.12 |
| Yeast and Mold | ≤ 100 CFU/g | USP <2021> Ph.Eur.2.6.12 |
| E. Coli | Negative/g | USP <2021> Ph.Eur.2.6.13 |

| | | |
|--------------------------------------|--|-----------------------------|
| Salmonella | Negative/10g | USP <2021> Ph.Eur.2.6.13 |
| S.Aureus | Negative/g | USP <2021> Ph.Eur.2.6.13 |
| Pseudomonas aeruginosa | Negative/g | USP <2021> Ph.Eur.2.6.13 |
| Bile-tolerant gram-negative bacteria | Negative/g | USP <2021> Ph.Eur.2.6.13 |
| Package | 25kgs/drum | |
| Shelf life | 2 Year When Properly Stored | |
| Storage | The product may be stored for 24 months from the date of manufacture in the unopened original container and at room temperature. It should be protected from light, heat, oxygen and moisture. Keep the container tightly closed. Once opened, use contents quickly | |
| Intended Application | Suitable for manufacturing tablets and hard-shell capsules. Also as a food nutrition enhancer for food and beverage | |

2.Origin & ingredient

Country of origin of the product: China

Origin Statement: available

| | | | |
|---|---|--|---------|
| This Product Is A Pure Material <input checked="" type="checkbox"/> | | This Product is a Compound Material <input type="checkbox"/> | |
| Composition of the products | | 100% Chondroitin Sulphate | |
| Animal Origin | <input checked="" type="checkbox"/> Bovine | Specific Source | |
| | <input type="checkbox"/> Porcine | Specific Source | |
| | <input type="checkbox"/> Avian, | Specific Source | |
| | <input type="checkbox"/> Others: | Specific Source: | |
| Mineral Origin | <input type="checkbox"/> | Specific Source: | |
| Synthetic | <input type="checkbox"/> | Starting Material: | Origin: |
| | | Starting Material: | Origin: |
| Biotechnological Processing | <input type="checkbox"/> Catalysis By Enzymes | Name Of Enzyme: Sources Of Enzymes: | |
| | <input type="checkbox"/> Micro -Organisms | Source Of Medium: | |
| Botanical Origin | Botanical Name: | / | |
| | Part: | / | |
| | Wild Or Cultivated : | / | |
| | Country Of Origin: | China | |
| | Solvent Used : | Ethanol | |

3.Nutrition data

| | | |
|--|--|--------------------------------------|
| Nutritional composition | <input checked="" type="checkbox"/> per 100g | <input type="checkbox"/> per serving |
| <input type="checkbox"/> Energy(kJ) <input checked="" type="checkbox"/> Energy(kcal) | 269.2 kcal | |
| Fat (g) | <0.1 | |
| Carbohydrates (g) | 42.1 | |

| | |
|---|------|
| Protein (g) | 25.2 |
| Remarks: Nutrition data are obtained by 3 rd party lab; tested on a yearly basis | |

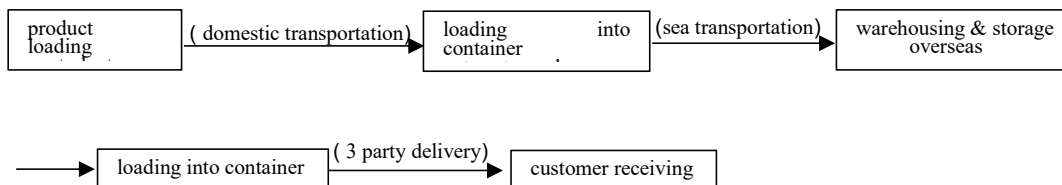
| 4.Manufacture details | |
|--|--|
| Manufacturer name: | Yantai Ruikangda Biochemical Products Co., Ltd |
| Address: | Tianmu Road Development Zone,Laiyang,Shandong,P.R.China |
| Main products: | Chondroitin Sulphate |
| Capacity of production | 1,000mt |
| Number Of Employees In Production: 50 | Number Of Employees In QA/QC.: 6 |
| Quality And Food Safety Management System Certificated By Accredited Authority. E.G.: ISO Series, GFSI Series HACCP GMP、Cgmp FAMI-QS、GMP+ | ISO9001 Series: <input type="checkbox"/> ISO9001 <input checked="" type="checkbox"/> ISO22000 <input type="checkbox"/> ISO14001 <input type="checkbox"/> ISO45000 GFSI Series: <input type="checkbox"/> BRC <input type="checkbox"/> FSSC22000 <input type="checkbox"/> IFS <input type="checkbox"/> SQF <input checked="" type="checkbox"/> GMP <input checked="" type="checkbox"/> HACCP <input type="checkbox"/> FAMI-QS <input type="checkbox"/> GMP+ |
| Product Related Certificates | <input checked="" type="checkbox"/> HALAL <input type="checkbox"/> KOSHER <input type="checkbox"/> IP <input type="checkbox"/> ORGANIC |

| 5.Process Quality And Food Safety | |
|---|--|
| Flow Chart: This Product Specification Has Listed The Detailed Process Flow Chart Of Each Step Of The Actual Production Process From Raw Material Pretreatment To Finished Product Warehousing, Including Possible Additives, Processing Aids, Steps To Remove Foreign Matters, CCP, Water Used, Compressed Air Etc. | Integrity Flow Chart Available <input checked="" type="checkbox"/> |
| Foreign Body Control | |
| Have Implemented Control Procedures For Glass, Fragile Plastic Materials <input checked="" type="checkbox"/> | |
| <input checked="" type="checkbox"/> Sieve | Location: Before Packing Mesh Size: 0.2mm |
| <input checked="" type="checkbox"/> Magnetic Device | Location: Before Packing Magnetic Strength: 13400Gauss |
| <input type="checkbox"/> Filter Bag Or Filter Membrane | Location: Aperture Of Filtering Device: |
| Pest Control | |
| Conducted By Manufacturer <input type="checkbox"/> | |
| By External Contractor <input checked="" type="checkbox"/> | Name Of Contractor: |
| Inspection Frequency: 1 Time Per Year | |
| Batch No.& Traceability | |
| Batch Size: | 1,000kgs |
| Batch Definition: | Signification Of The Batch No. By An Example: Abbr. Of Customer + Year + Month + Date Sequence Produced By This Day ACER20201205: Acer + year + month + date |

We Confirm That We Perform Batch And Traceability Management On The Whole Process From Raw Material Receiving, Production Process, Storage And Transportation, By Focusing On Raw Materials, Semi-Finished Products, Production Processing And Transportation, Related Records And Product Labels. Take Traceability Exercise On A Annual Basis.

Supply Chain Custody

List All The Stages In The Process Of Supply Chain Including Detail Of Every Link Back To Farm, Field Or Ocean. Every Time The Raw Material Is Moved, Paid For, Handled, Stored Or Processed, And Final To Customer



| GMO Declaration | YES | NO |
|---|---|---|
| The Product Contain Or Consist Of GMO | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The Product Is Produced From GMO Or Contain Ingredients Produced From GMO (Irrespective Of Whether There Is NDA Or Protein Of GM Origin In The Final Production) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| This Product Is Produced By Means Of GM Microorganism Including Precursor Substances, E.G. With Gmos Or Genetically Modified Microorganisms Processing Aids(Bacteria, Yeast,..) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| This Product Is Produced With The Help Of Enzymes, Which Were Obtained From GMOs | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does The Product Contain Any Ingredients From Animal? If Yes, Are Genetically Modified Crops Contained In The Feed For The Animal? | <input checked="" type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| We Confirm That This Product Complies With Regulations EC/18292003 And EC1830/2003 And Keep NON-GMO Statement Available | | <input checked="" type="checkbox"/> |

6. Allergen declaration

We have carefully reviewed this product according to EU Regulation 1169/2011 and modifications and confirm the following:

| | Direct incorporation as a base raw material or in a derivative form (don't forget the carriers, the additives and the processing aids) | | CROSS CONTAMINATION | | | | | |
|---|--|----|---------------------------------|----|-------------------------------------|----|------------------------------------|----|
| | | | Presence on the production line | | Presence on the production workshop | | Presence on the production factory | |
| | Yes (precise nature) | No | Yes (precise the nature) | No | Yes (precise the nature) | No | Yes (precise the nature) | No |
| Cereals containing gluten(1) and products thereof | | N | | N | | N | | N |
| Crustaceans and products thereof | | N | | N | | N | | N |
| Eggs and products thereof | | N | | N | | N | | N |
| Fish and products thereof (2) | | N | | N | | N | | N |
| Peanuts and products thereof | | N | | N | | N | | N |

| | | | | | | | | |
|--|--|---|--|---|--|---|--|---|
| Soybeans and products thereof (3) | | N | | N | | N | | N |
| Milk and products thereof (including lactose)(4) | | N | | N | | N | | N |
| Nuts (5) or products thereof | | N | | N | | N | | N |
| Celery and products thereof | | N | | N | | N | | N |
| Mustard and products thereof | | N | | N | | N | | N |
| Sesame seeds and product thereof | | N | | N | | N | | N |
| Sulphur dioxide and sulphites at concentrations of more than 10mg/kg or 10 mg/l expressed as SO ₂ | | N | | N | | N | | N |
| Lupines and products thereof | | N | | N | | N | | N |
| Mollusc and product thereof | | N | | N | | N | | N |

(1) Cereals which contain gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) except: wheat-based glucose syrups including dextrose, wheat-based maltodextrins, glucose syrups based on barley, cereals used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages;

(2) Except: fish gelatine used as carrier for vitamin or carotenoid preparations, fish gelatine or Isinglass used as fining agent in beer and wine;

(3) Except fully refined soybean oil and fat, natural mixed tocopherols (E306), natural D-alpha tocopherol, natural D-alpha tocopherol acetate, natural D-alpha tocopherol succinate from soybean sources; vegetable oils derived phytosterols and phytosterol esters from soybean sources; plant stanol ester produced from vegetable oil sterols from soybean sources;

(4) Except when used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages, lactitol;

(5) almond (*Amygdalus communis* L.) hazelnuts (*Corylus avellana*), walnut (*Juglans regia*), cashew (*Anacardium occidentale*), pecan nuts (*Carya illinoensis*), brazil nut (*Bertholletia excelsa*), pistachio nut (*Pistacia vera*), macadamia nut and queensland nut (*Macadamia terniflora*) and products thereof, except nuts used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages;

7. Non Irradiation

(According To Eu Directive 1999/2/EC & 1999/3/EC)

| | | |
|---|-------------------------------------|--|
| This Product Has Been Treated With Ionising Radiation | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| None Of The Raw Materials We Used For This Product Have Been Treated With Ionising Radiation. | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| We Confirm Above Non-Irradiation Statement Is Available | <input checked="" type="checkbox"/> | |

8. Nanomaterial

(According To Eu Regulation (Eu) No. 1169/2011)

| | | |
|---|-------------------------------------|--|
| This Product Does Contain Any Nanomaterials As Defined In Eu Food Legislation | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| This Product Has Been Made With Nanotechnology | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| We Confirm Above Non-Nanomaterial Statement Is Available | <input checked="" type="checkbox"/> | |

9. Residual Solvents

(According To UE Directive 2009/32 Modified By(UE)2010/59; EP5.4; USP476; ICH Q3C(R7))

| | |
|---|--|
| For This Product Following Solvents Are Used During Production Process: | |
| Solvent A: Max Residual Level: | <input checked="" type="checkbox"/> Solvent Used |
| Solvent B: Max Residual Level: | <input type="checkbox"/> Solvent Not Used |

| | |
|--|---|
| We Confirm Solvent Residual Of This Product Complies With: | <input checked="" type="checkbox"/> EP8.0 <input checked="" type="checkbox"/> USP <476> <input checked="" type="checkbox"/> ICH Q3C(R7) <input checked="" type="checkbox"/> Directive 2010/59/EU |
| We Confirm Solvent Residual Statement Is Available | <input checked="" type="checkbox"/> |

| | |
|---|--|
| 10.Pesticide Residual (According To EC 396/2005; EP07; USP <561>) | |
| This Product Is Of Vegetable Origin | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| We Confirm Pesticide Residual Of This Product Complies With: | <input checked="" type="checkbox"/> EC 396/2005 <input checked="" type="checkbox"/> EP 07/2008 <input checked="" type="checkbox"/> USP<561> <input checked="" type="checkbox"/> N/A |
| Pesticide Residual Statement Available | <input checked="" type="checkbox"/> |

| | |
|--|--|
| 11.BSE/TSE Information (According To EU Legislation 999/2001; EP General Chapter 5.2.8) | |
| <p>Cattle, Sheep, Goats And Animals That Are Naturally Susceptible To Infect With Transmissible Spongiform Encephalopathy Agents Or Susceptible To Infection Through The Oral Route Other Than Humans And Non-Human Primates Are Defined As "ESE-Relevant Animal Species</p> <p>Pigs Ad Birds Are Not Naturally Susceptible To Infection Via The Oral Route; Therefore, They Are Not TSE-Relevant Animal Species. Dogs, Rabbits And Fish Are Not TES-Relevant Animal Species."</p> | |
| The Product Contains Ingredients Of Ruminant Origin And No Materials Derived From, Or Exposed To Ruminants Affected By Or Under Quarantine For Transmitting Transmissible Spongiform Encephalopathy (TSE) / Bovine Spongiform Encephalopathy (BSE) | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA |
| In The Manufacturing Of This Product, There Is Raw Or Source Material And /Or Reagent Used That Is Of Animal Origin I.E. Bovine, Serum-Albumin, Enzymes, Culture Broths Including Those Used To Prepare Working Or Master Cell Tanks | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| Equipment/Systems/Tools Use For Processing Or Storage Of The Material Comes Into Contact At Any Time With Materials Of Animal Origin (E.G., Components Of Media Filler Used To Check Such System) | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| The Material Is Purified By Using Solvents, Chromatographic Media Or Buffers That Contain Components Of Animal Origin | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| We Confirm This Product Complies With: | <input checked="" type="checkbox"/> EU Legislation 999/2001& <input checked="" type="checkbox"/> EP General Chapter 5.2.8 |
| We Confirm BSE/TSE Statement Is Available | <input checked="" type="checkbox"/> YES |

| | |
|---|---|
| 12.Contaminants Information (According To EU Regulation NO.1881/2006 And NO.629/2008 As Regards Maximum Levels For Certain Contaminants In Foodstuff) | |
| ●Aflatoxin B1 <5ppb | <input checked="" type="checkbox"/> YES (Frequency For Surveillance Test Or |

| | | |
|--|---|---|
| <ul style="list-style-type: none"> ●Aflatoxins B1 + B2 + G1 + G2 <10ppb ●Ochratoxin A <15ppb ●Melamine | <input type="checkbox"/> NO <input type="checkbox"/> NA | Batch Test) |
| <p>For Polycyclic Aromatic Hydrocarbons, In Cocoa Fibre, Banana Chips, Food Supplements And Their Preparations, Dried Herbs <i>And Dried Spices:</i></p> <ul style="list-style-type: none"> ●Maximum Level Of 10 µG/Kg Of Benzo(A)Pyrene ●50 µG/Kg For The Sum Of PAH4 (PAH4; Benzo[A]Pyrene,Chrysene, Benz[A]Anthracene And Benzo[B]Fluoranthene) In Food Supplements | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA | (Frequency For Surveillance Test Or Batch Test) |
| We Confirm This Product Complies With NO.1881/2006 And NO.629/2008 And Keep Compliance Statement Available | | <input checked="" type="checkbox"/> YES |