



**SHAMROCK<sup>®</sup>**  
**Nutrasciences**

New Leaf in Nutraingredients



**UNIT 3**

**COenzyme Q10**

One of the world's largest producer of COenzyme Q10



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Wonder Nutraceutical "Miracle"



## Shenzhou Biology & Technology Co., Ltd. China (SZBT)

One of the world's largest producer of COenzyme Q10

Join Hands With



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As A Global Marketing partner



## Wonder Nutraceutical "Miracle"

- Part of china Aerospace Science and Technology Corporation (CASC)
- Total investment of RMB 900 Millions (USD95 Millions)
- Area 594,00 sqmtrs total site area
- Industrial base area of 330,00 ssq mtrs.
- Number of employees: 572

### Global Marketing Tie Up

- Shenzhou Biology & Technology Co., Ltd. China has appointed Shamrock Nutrasciences as their Exclusive global marketing partner for adding value of their products on worldwide exclusive basis.
- The main objective of such marketing tie up is to add value to Shenzhou's Co Enzyme Q10 with right distribution channels and distribution of end user with complete customer satisfaction for both distributors and end users thereby aiming for a win-win situation.

### Summary Of The Product

- Coenzyme Q10, also known as ubiquinone or ubidecarenone. Coenzyme Q10 is a substance that's found naturally in the body and helps convert food into energy.
- CoQ10 is a substance similar to a vitamin. It is found in every cell of the body. Your body makes CoQ10, and your cells use it to produce energy your body needs for cell growth and maintenance. It also functions as an antioxidant, which protects the body from damage caused by harmful molecules. CoQ10 is naturally present in small amounts in a wide variety of foods, but levels are particularly high in organ meats such as heart, liver, and kidney, as well as beef, soy oil, sardines, mackerel, and peanuts. Coenzymes help enzymes work to digest food and perform other body processes, and they help protect the heart and skeletal muscles.
- Many claims are made about CoQ10. It is said to help heart failure, as well as cancer, muscular dystrophy, and periodontal disease. It is also said to boost energy and speed recovery from exercise. Some people take it to help reduce the effects certain medicines can have on the heart, muscles, and other organs.

### Production Facilities

- Total fermentation capacity : 10,000 m<sup>3</sup> along with extraction and final purification.
- Located strategically in Tuoketuo Industry Park, Inner Mongolia with key fermentation industry Area due to dry climate and long and cold winter. Abundant availability of resources of water and power – Coal are raw materials to support large production.
- Distribution control system (DCS) for main Fermentation and extraction Process huge seed fermentation sugar sterilisation / Sugar Sterilisation / Addition Vessels, Substrate Vessels and Harvest Tanks.

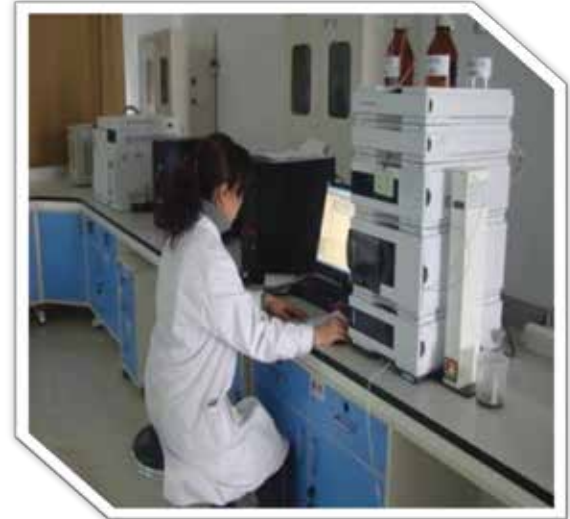




## Wonder Nutraceutical "Miracle"

### Quality Control & Quality Assurance

- SBT is dedicated to complete high tech quality control and with all major equipments
- The laboratory is well equipped with top of the line instruments such as:
  - Waters Alliance HPLC and UV detector
  - Agilent HPLC with UV detector
  - Perkin-Elmer Dual Detector Clarus 600GC
  - Shimadzu HPLC with auto-sampler and UV detector
  - FT-IR , Shimadzu 8400S
  - UV-Vis Spectrophotometer Shimadzu
  - Perkin-Elmer 341 digital polarimeter
  - Mettler Toledo Instruments (Micro Balance, KF Titrator)
  - San system Skalar instrument
  - Atomic Absorption Spectrophotometer



### Quality Assurance

- Comprehensively designed and well implemented QA system to ensure that the products are manufactured to specified quality requirements
- Compliance to cGMP at all phases of manufacturing
- Quality procedures documented, designed and controlled to take into account the basic attributes of drugs viz. efficacy, safety & stability
- The quality system documented - Quality Policy  
Quality Manual, Validation master Plan Standard  
Operating Procedures Quality Records and Logbooks



### Microlabs

- Fully equipped Microlab
  - Incubator shakers
  - Laminar benches
  - Lyophilizer
  - Deep Freezer(-80 Deg C)
  - Culture Storage and Security systems
  - Classified Areas with proper air handling units

### Qualified Microbiologists

### Regulatory & Certification

- |                                  |                      |            |
|----------------------------------|----------------------|------------|
| • HALAL / KOSHER                 | • ISO 9000           | • GMP      |
| • DRUG MASTER FILE WITH CTD      | • SIDI DOCUMENTATION | • REGISTRY |
| • FERMENTATION TECHNICAL PROFILE |                      |            |



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## Wonder Nutraceutical "Miracle"

### Research & Development

- Fully dedicated R&D centre spread over 15,000 sq mtrs is completely focussed due to its natural resourceful advantage to be one of the most advanced and largest aerospace bio technology facility in Fermentation field. The significant advantage in R&D bio fermentation technology through mutation breeding induced by space flight, further selection and regeneration, cultivation of stable and high yielding strains to also improve quality of the product.
- We are dedicated to enforcing the national policy of CASC to accelerate transformation of of space technology and to civil applications with high technology industrialisation.
- Dedicated to industrialisation of space biotechnology and research and putting into commercial scale. There are 57 post graduates and Ph.D's in our R&D Center, including 21 senior engineers including dedicated professional team.
- Shenzhou Biology & Technology Co., Ltd. is committed to fully utilize its technological superiority, talent advantages and product advantages to make itself the most famous high-tech enterprise in aerospace biotechnology and supply excellent-quality biology medicine for the world.
- The responsibility of Shenzhou Biology & Technology Co., Ltd. is to provide widely opportunities for employees' self-development, provide satisfaction services for bring in good returns for shareholders, and contribute more to the society.



**Shenzhou Biology & Technology Co., Ltd.**  
**China (SZBT)**

Marketing Tie-up With



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