

SINOWAY Newsletter

Oct, 2023

☆ Industry news and Sinoway Comments

1. Sinoway fruitful meetings during CPhI exhibition in Barcelona

Our Sinoway booth was 3G11 in Hall 3 of CPhI Worldwide(Barcelona) during Oct.24~26, which was in CDMO zone and attracted both old and new customers all over the world with below special services:

- 1) Continuous Flow chemistry
- 2) Enzymic catalytic reaction/Enzymatic resolution
- 3) High technology for purification and separation

We had fruitful meetings with customers to proceed with some new projects after signing secret agreements.

2. Sinoway NMN series products obtain Halal & Kosher certificates

In October, Sinoway has obtained Halal and Kosher certificates for one of its bestselling series products - **NMN** (β -Nicotinamide Mononucleotide), **NAD** (β -Nicotinamide Adenine Dinucleotide) , **NRCI** (Nicotinamide Riboside Chloride).

Sinoway has been exporting NMN and NAD early since 2018, with top quality (each batch purity 99%up by HPLC) and always competitive price.

Be free to check with us for more information about the Halal and Kosher certificates, especially if your NMN/NAD/NRCI products are intended for regions required Halal & Kosher certificates, especially middle east countries.

☆ New Technology Introduction

This month, we introduce **Supercritical CO2 Crystallization Technology**

What is Supercritical CO2 Crystallization Technology ?

By dissolving the API in a suitable organic solvent to form a solution, and Supercritical CO2 is used as antisolvent to precipitate solid particles quickly, so as to form fine particles with good flowability.

Characteristics of Supercritical CO2 Crystallization

- **FDA approved** technology
- The process can be **rapid scaled up**
- **Low residual solvent** and good secondary processing behaviour
- Well **control of particle size** (200nm -10um)
- Very **good flowability**

Applications of Supercritical CO2 Crystallization

1. Single step process with low cost of manufacture, which can change crystallization form
2. Improve the performance of both small molecule and biological medicines(large molecule), e.g. **solid form control, poorly soluble drugs, optimising inhaled delivery;**
3. **Control particle size** by uniforming morphology;
4. **Transform natural extracts** which are difficult to crystallize - **very sticky extractum**



(containing >20% water) **into dry powder** by Single step process

5. Functional excipients or API can also be introduced into the Supercritical CO₂ Crystallization process, to produce formulated particles enabling product features such as **controlled release, coated particles for taste masking** and **combination therapy (combination products to make scalable co-crystals)**

6. Vaccine programme - reformulating an injectable biotherapeutic for Dry Powder Inhalation (DPI)

7. Optimising for solubility, stability, bioavailability, targeted delivery

8. **Biopharmaceuticals:** attractive alternative to complex spray and freeze drying technologies (**Opportunities for sterile processing**)

9. Potentially able to **eliminate impurities** by exploiting different solubility.

10. Ability to **crystallise materials** that cannot be conventionally crystallised.

Sinoway is well-prepared for receiving **CDMO projects** using this particular **Supercritical CO₂ Crystallization technology**, please be free to send inquiries if it can help with your on-going projects.