

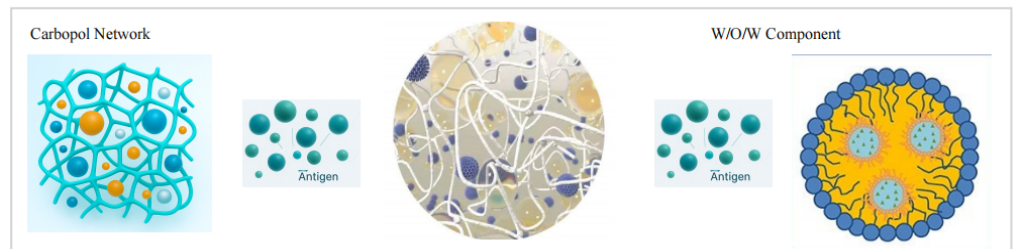
SDA 703B™ 聚合物佐剂 / Polymer Adjuvant

一、产品概述

SDA 703B™ 是基于 Carbopol 并结合微量 SDA BIO W/O/W 结构组分的复合型疫苗佐剂，可增强抗原稳定性及免疫反应。

二、核心特点

- Carbopol 聚合物体系
- 含 W/O/W 结构
- 即用型
- 体液+细胞免疫
- 适用于黏膜免疫



三、成分组成

包含 Carbopol 与脂质组分，不含动物源成分，符合 USP-NF 与 EP 标准。

四、免疫反应

支持体液免疫和细胞免疫，适用于病毒、支原体、细菌、蛋白、多糖、DNA、RNA、VLP 等抗原。

五、安全性

适用于动物疫苗，符合食品动物残留要求。

六、储存与包装

储存：4 °C
包装：20 L / 桶

七、使用方法

用量：15% – 20% (v/v)
通常 PBS 可使体系达到中性 pH，若偏低则调至 6.8 – 7.2。

SDA BIO — 动物疫苗佐剂平台

SDA 703B™ Polymer Adjuvant – Full Technical Manual

Product Overview

SDA 703B is a carbopol-based polymer adjuvant integrated with an SDA BIO W/O/W component. It forms a structured polymer–oil hybrid system that encapsulates antigen, enhances stability, and improves antigen presentation and immune response.

Key Points

- Carbopol based
- Contains SDA BIO W/O/W component
- Ready to use
- Stimulates humoral and cellular immunity
- Suitable for mucosal delivery

Ingredients

Contains carbopol and lipid components. Free of animal-origin materials. Meets USP-NF and EP standards.

Manufacturing and Testing

Manufactured under aseptic conditions. Each batch tested for identity, pH, density, and sterility.

Immune Response

Supports both humoral and cellular immune responses. Suitable for proteins, polysaccharides, DNA, RNA, VLPs, and more.

Safety

Designed for veterinary use with safe residue profile for food animals.

Stability

Stable polymer-emulsion system.

Syringeability

≤20% formulations pass through 25G needle.

Preservatives

No preservative included. Compatible with most preservatives.

Storage

Store at 4°C.

Packaging

20 L / drum.

Instructions for Use

1. Typical dosage for injectable vaccines: 15%–20% (v/v).
2. Mix adjuvant gently before use.
3. Add slowly to antigen under mixing.
4. Normally the antigen with PBS is enough to bring final vaccine to a neutral pH. In case a lower pH is resulted, adjust pH gradually to 6.8–7.2 using NaOH.
5. Continue mixing for 4–6 hours until stable.

Notes

Avoid rapid pH adjustment. Viscosity increases with pH. Use PBS or NaCl to reduce viscosity if needed.

SDA 703B™

Polymer–Oil Hybrid Adjuvant Platform (SDA BIO)

Beyond Alum. Structured Immunity. Better Manufacturing.



SDA 703B is a carbopol-based adjuvant integrated with an SDA BIO W/O/W component. It forms a structured polymer–oil hybrid depot that enhances antigen stability, controls release, and improves immune activation while maintaining excellent injectability.

Key Features

- Polymer–oil hybrid structure (carbopol + W/O/W)
- Balanced humoral and cellular immunity
- No injection site residue (vs alum)
- Ready-to-use, process-friendly
- Excellent syringeability ($\leq 20\%$, 25G)

Performance Comparison

Feature	Alum	SDA 703B
Depot	Low–Moderate	Moderate–High
Release	Slow, static	Controlled, dynamic
Cellular Immunity	Limited	Enhanced
Residue	Yes	No
Processability	Moderate	Excellent

Applications

- Mycoplasma, bacterial and multivalent vaccines
- Viral and subunit vaccines
- Mucosal delivery (IN, oral, ocular)
- Aquaculture immersion vaccines

Technical Specifications

Parameter	Specification
Storage	4°C
Packaging	20 L / drum
Dosage (Injectable)	15%–20% (v/v)
Appearance	Milky white, homogeneous

Formulation Guidance

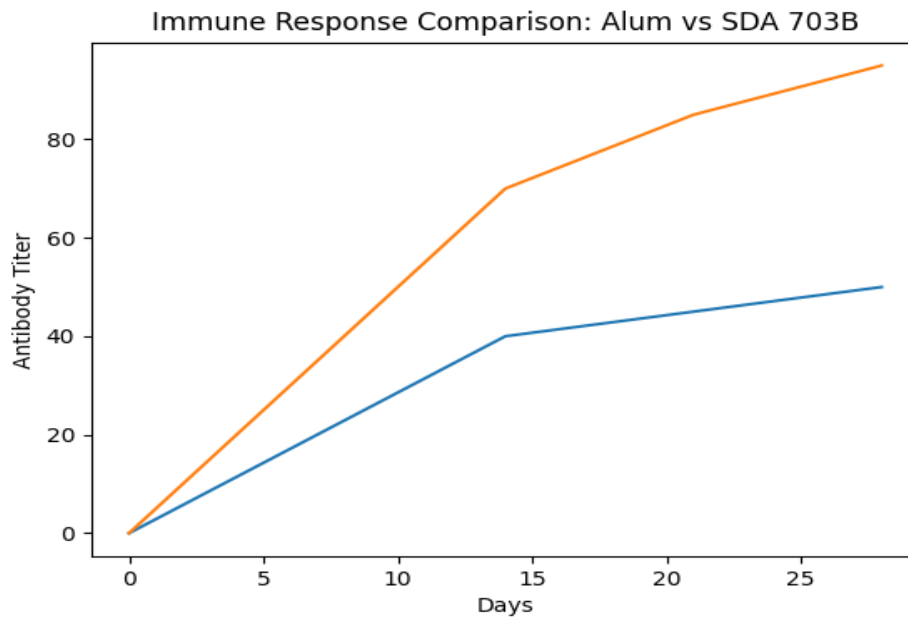
Normally the antigen with PBS is enough to bring final vaccine to a neutral pH. In case a lower pH is resulted, adjust pH gradually to 6.8–7.2 using NaOH. Mix under moderate agitation and continue for 4–6 hours until stable.

SDA BIO – *Adjuvant Solutions for Next-Generation Veterinary Vaccines*

SDA 703B™ Data-Driven Sales Brochure

Immune Performance Data

SDA 703B demonstrates enhanced immune response compared to aluminum-based adjuvants, with faster onset and higher peak antibody titers.



Key Observations:

- Faster immune activation (Day 7)
- Higher peak antibody levels
- Sustained response over time
- Balanced humoral and cellular immunity

Mycoplasma (Mhp) Consideration:

Polymer-only systems (e.g., SDA 701B) may show weak performance in Mhp vaccines. SDA 703B overcomes this by integrating a W/O/W component, improving antigen presentation and immune activation.

SDA BIO – Advanced Adjuvant Platform