
	Document ID:	TDS-S-NC-NZ-035	Version:	004
	Date of Issue:	28-APR-2021	Approved by:	Anna Becker
	Review Date:	10-JAN-2022	Signature:	
	Title:	TECHNICAL DATA SHEET		

Product Name	Newborn Calf Serum
Filtration/Treatment	0.2 µm sterile filtered and Gamma Irradiated
Origin	New Zealand
Product Code	S-NC-NZ-035
Shelf Life	5 Years from DOM
Storage Temperature	<-15°C
Shipping Temperature	dry ice



Physical and Chemical Analysis	Method	Specifications	Units
Identity	Internally Validated	Bovine	n/a
Appearance	Visual	Clear yellow-amber to dark amber Liquid	n/a
Specific Gravity	Mass Balance	> 1.01	g/ml
pH	Electronic pH Meter	6.8 - 8.2	n/a
Osmolality	Osmometer	260 - 340	mOsm/kg
Endotoxin	LAL Kinetic	Test and Report	EU/ml
Free Hemoglobin	Colorimetric	Test and Report	mg/dl

Protein Profile	Method	Specifications	Units
Total Protein	IDEXX Catalyst One	Test and Report	g/dl
Albumin	IDEXX Catalyst One	Test and Report	g/dl

Sterility	Method	Specifications	Units
Sterility	Eur. Ph. 2.6.1	Pass	n/a
Mycoplasma	qPCR	Not detected	n/a

Virus Testing	Method	Specifications	Units
BHV-1/IBRV	qPCR	Test and Report	n/a
PIV-3	qPCR	Test and Report	n/a

Biochemistry	Method	Specifications	Units
Aspartate Aminotransferase (AST)	IDEXX Catalyst One	Record	U/L
Alanine Aminotransferase (ALT)	IDEXX Catalyst One	Record	U/L
Lactate Dehydrogenase (LDH)	IDEXX Catalyst One	Record	U/L
Alkaline Phosphatase (ALKP)	IDEXX Catalyst One	Record	U/L
Gamma-Glutamyl Transferase (GGT)	IDEXX Catalyst One	Record	U/L
Cholesterol (CHOL)	IDEXX Catalyst One	Record	mmol/L
Glucose (GLU)	IDEXX Catalyst One	Record	mmol/L
Urea (BUN)	IDEXX Catalyst One	Record	mmol/L
Creatinine (CREA)	IDEXX Catalyst One	Record	µmol/L
Uric Acid (URIC)	IDEXX Catalyst One	Record	µmol/L
Calcium (Ca)	IDEXX Catalyst One	Record	mmol/L
Phosphorus (PHOS)	IDEXX Catalyst One	Record	mmol/L
Total Bilirubin (TBIL)	IDEXX Catalyst One	Record	µmol/L
Magnesium (Mg)	IDEXX Catalyst One	Record	mmol/L
Sodium (Na)	IDEXX Catalyst One	Record	mmol/L
Potassium (K)	IDEXX Catalyst One	Record	mmol/L
Chloride (Cl)	IDEXX Catalyst One	Record	mmol/L

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RECOMMENDED USE:

Storage

To effectively preserve the integrity of animal serum, it should be stored frozen and protected from light. The recommended storage temperature is <-15°C.

Multiple thaw/freeze cycles should be avoided, as they will accelerate the degradation of serum nutrients and can encourage the formation of insoluble precipitates. For this reason, serum should never be stored in “frost-free” freezers. These types of freezers periodically warm themselves to avoid internal ice deposits and are detrimental to the stability of frozen serum products.

Suggested Thawing Procedure

1. Remove the serum bottles from the freezer and allow them to adjust to room temperature for approximately 10 minutes.
2. Place each container in a 30 to 37 °C water bath or incubator. Excessive temperatures will degrade heat labile nutrients. If using a water bath, prevent the bottle caps from being submerged.
3. Gently agitate the bottles every 10 – 15 minutes until the serum is completely thawed.

Efficient and Effective Usage

After thawing, use the serum promptly. Liquid serum may be stored refrigerated (2 to 8 °C) up to four weeks. To avoid thaw/freeze cycles or long periods of refrigeration, it is recommended that any unused serum be immediately dispensed into small, useful aliquots and refrozen for future use.

THIS PRODUCT IS NOT INTENDED FOR HUMAN OR ANIMAL CONSUMPTION OR THERAPEUTIC USE.