

## **CERTIFICATE OF ANALYSIS**

## 1. Identification

Catalogue Number C988901

Lot Number 20-YKZ-45-1

**Product Name** 

Cyclosporin A-13C2,d4 (Major)

Synonyms

Cyclosporine-13C2,d4; Ciclosporin-13C2,d4; Atopica-13C2,d4; Sandimmun(e)-13C2,d4; Neoral-13C2,d4; Optimmune-13C2,d4; Restasis-13C2,d4;

**CAS Number** 

Solubility

N/A

Benzene (Slightly), Chloroform

(Slightly)

Synthetic

Molecular Formula

Molecular Weight

Source of Product

 $C_{60}^{13}C_2H_{107}D_4N_{11}O_{12}$ 

Purity

1208.62

**Tests** 

MS

>95%

2. Warnings

**HPLC** Purity

Not Determined

3. Analytical Information

4. Signatures

Reviewed by

Play

**Test Date** 

**Retest Date** 

C of A Approved by

3/18/2024

3/16/2028

Henry Tieu Toni Rantanen Chanell Chu Product Quality Specialist Manager, Quality Assurance Quality Assurance Associate

Reviewed by

**Shipping Condition** 

This Product Is Stable To Be Shipped At Room

Temperature

**Structure** 

**Long Term Storage Conditions** 

4°C

Results Off-White Solid

Conforms

95.21% (200 nm)

Conforms

Appearance White to Off-White Solid **NMR** 

Conforms to Structure

**Specifications** 

Conforms to Structure

>95%

## Additional Information

Normalized Intensity:  $d_0 = 0.18\%$ ,  $d_1 = 0.15\%$ ,  $d_2 = 0.57\%$ ,  $d_3 = 0.12\%$ ,  $d_4 = 0.58\%$ ,  $d_5 = 48.93\%$ ,  $d_6 = 49.47\%$ 

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed.

The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

101 Milani Blvd., Vaughan, ON., L4H 4M4 Canada Tel: (416) 665-9696 E-mail: Orders.TRC@LGCGroup.com Website: www.lgcstandards.com