

## **CERTIFICATE OF ANALYSIS**

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA Tel: (416) 665-9696, Fax: (416) 665-4439

Email:orders.trc@lgcgroup.com Website: www.trc-canada.com

## 1. Identification

Product:

Catalogue Number: C366045 CAS Number: 68077-26-9

Synonym: 7-Chloro-1-ethyl-6-fluoro-1,4-dihydro-4-oxo-

3-quinolinecarboxylic Acid; 1-Ethyl-1,4-dihydro-4-oxo-6-fluoro-7-chloro-3-quinolinecarboxylic Acid; 7-Chloro-1,4-dihydro-1-ethyl-6-fluoro-4-oxo-3-

quinolinecarboxylic Acid; 7-Chloro-1-ethyl-6-

fluoro-1,4-dihydro-4-oxoquinoline-3-carboxylic Acid; Norfloxacin EP Impurity A; Norfloxacin EP Impurity A; Norfloxacin USP Related Compound A (7-Chloro-1-ethyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-

carboxylic Acid)

Structure:

Acid, 90%

F CO<sub>2</sub>H

O

7-Chloro-1-ethyl-6-fluoro-1,4-

dihydro-4-oxoquinoline-3-carboxylic

Molecular Formula:

C<sub>12</sub>H<sub>9</sub>ClFNO<sub>3</sub>

Molecular weight:

269.66

Source of Product:

N/A

Solubility:

DMSO (Slightly, Heated), Methanol (Slightly, Heated)

Lot Purity: 90% Number: 6-MIC-169-1

Shipping This Product Is Stable To Be Condition: Shipped At Room Temperature Storage Condition: 4°C

2. Warning

Warning 1: Not Determined Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results:

Appearance White to Pale Yellow Solid Off-White Solid

NMR Conforms to Structure Conforms

Elemental Analysis Conforms %C: 52.81, %H: 3.01, %N: 5.15

F NMR Conforms to Structure Conforms
MS Conforms to Structure Conforms

Additional Information: Elemental Analysis: (Theoretical) %C: 53.45, %H: 3.36, %N: 5.19

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of  $\pm$  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.

## 4. Signatures

**Reviewed By** Nicole Yip

**Reviewed By** Toni Rantanen

C of A Approved By My Nguyen

**Test Date** 9/30/2020

**Retest Date** 

9/28/2027

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