

CERTIFICATE OF ANALYSIS

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1. Identification

Catalogue Number: P218515 CAS Number: 18466-51-8

Synonym: 3-(?-D-Glucopyranosyloxy)-5,7-dihydroxy-2-

(4-hydroxyphenyl)-1-benzopyrylium Chloride;

Callistephin (6CI,7CI,8CI); 3,4',5,7-

Tetrahydroxyflavylium Chloride 3-Glucoside; 3,4',5,7-Tetrahydroxyflavylium Chloride 3-?-

D-Glucopyranoside; 3-(?-D-

Product: Pelargonidin 3-Glucoside (>90%) Glucopyranosyloxy)-4',5,7-trihydroxyflavylium Ghloride; Callistephin Ghloride; Pelargonidin

3-O-Glucoside; Pelargonidin 3-O-?-D-Glucopyranoside; Pelargonidin 3-Glucoside; Pelargonidin 3-Monoglucoside; Pelargonidin 3-?-D-Glucopyranoside; Pelargonidin 3-?-

Glucoside

Structure: HO Molecular Formula:

OH

C21H21ClO10

Molecular weight:

468.84

Source of Product:

Synthetic

Solubility:

Methanol (Slightly), Water

(Very Slightly)

Lot Purity: 95% Number:

Shipping This Product Is Stable To Be Condition: Shipped At Room Temperature Storage Condition: -20°C

2. Warning

Warning 1: Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results:

Appearance Dark Red to Very Dark Red Solid Dark Red to Very Dark Red Solid

NMRConforms to StructureConformsMSConforms to StructureConformsChloride ContentReport Result6.2%

Additional Information: N/A

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

C of A Approved By

Test Date

Retest Date

Nicole Yip

Toni Rantanen

Reviewed By

Chanell Chu

8/18/2022

8/16/2026



