



Molecular Formula: $C_{28}H_{25}O_{15}^{(+)}$
Molecular Weight: 601.496
Accurate Mass: 601.11935
Percentage Composition: C 55.91%; H 4.19%; O 39.90%
Biological Source: Isol. from *Victoria amazonica* and *Victoria cruziana*

>>Derivative: 3-*O*-[6-*O*-Acetyl-2-*O*-(3,4,5-trihydroxybenzoyl)- β -D-galactopyranoside]

Molecular Formula: $C_{30}H_{27}O_{16}^{(+)}$
Molecular Weight: 643.534
Accurate Mass: 643.129915
Percentage Composition: C 55.99%; H 4.23%; O 39.78%
Biological Source: Isol. from *Nymphaea x marliacea*
Physical Description: Red pigment

>>Derivative: 3-*O*- β -D-Glucofuranoside
Synonym(s): Cyanidin 3-glucofuranoside

CAS Registry Number: 56552-39-7

Molecular Formula: $C_{21}H_{21}O_{11}^{(+)}$
Molecular Weight: 449.39
Accurate Mass: 449.10839
Percentage Composition: C 56.13%; H 4.71%; O 39.16%
Biological Source: Isol. from *Cotoneaster* sp. and *Rosa* sp.

>>Derivative: 3-*O*- β -D-Glucofuranoside, 5-*O*- β -D-glucopyranoside
Synonym(s): Cyanidin 3-glucofuranoside 5-glucoside

CAS Registry Number: 63596-57-6

Molecular Formula: $C_{27}H_{31}O_{16}^{(+)}$
Molecular Weight: 611.532
Accurate Mass: 611.161215
Percentage Composition: C 53.03%; H 5.11%; O 41.86%
Biological Source: Isol. from *Rosa platyacantha*

>>Derivative: 3,5-Di-*O*- β -D-glucofuranoside
Synonym(s): Cyanidin 3,5-diglucofuranoside

CAS Registry Number: 56596-77-1

Molecular Formula: $C_{27}H_{31}O_{16}^{(+)}$
Molecular Weight: 611.532
Accurate Mass: 611.161215
Percentage Composition: C 53.03%; H 5.11%; O 41.86%
Biological Source: Isol. from *Rosa platyacantha*

>>Derivative: 3-*O*- β -D-Glucopyranoside
Synonym(s): Chrysanthemin. Asterin $\ddagger$. Chrysontemin. Kuromamine

CAS Registry Number: 7084-24-4

Molecular Formula: $C_{21}H_{21}O_{11}^{(+)}$
Molecular Weight: 449.39
Accurate Mass: 449.10839
Percentage Composition: C 56.13%; H 4.71%; O 39.16%
Biological Source: Found in many plants and fruits, e.g. cherries, olives, grapes, *Cotoneaster* spp., *Ilex* spp. First isol. from *Chrysanthemum indicum*
Physical Description: Bronze-red prisms + 1.5H₂O (as chloride)

>>Derivative: 3-*O*- β -D-Glucopyranoside, 3'-*O*-[3,4-dihydroxycinnamoyl-($\rightarrow$ 6)- β -D-glucopyranoside]

CAS Registry Number: 150070-20-5

Molecular Formula: $C_{36}H_{37}O_{19}^{(+)}$