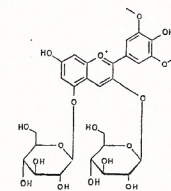


**INDOFINE Chemical Company, Inc.**121 Stryker Lane, Building 30
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**HPLC****Batch: 18****MALVIN CHLORIDE****020930S****IDENTIFICATION**

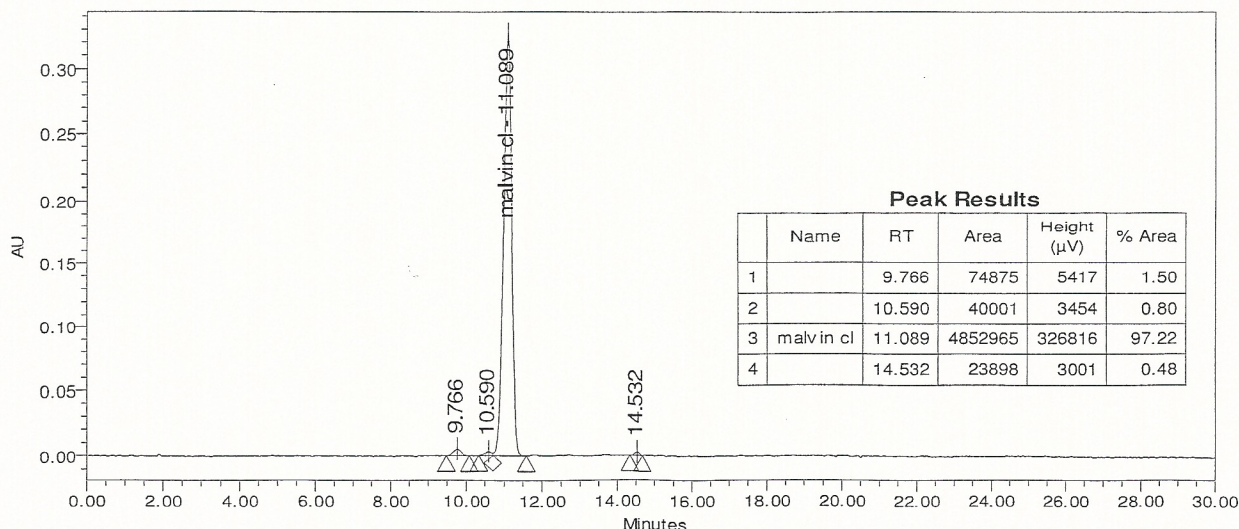
CAS number	[16727-30-3]
Chemical family	Anthocyan
Synonym	Malvidin-3,5-di-O-glucoside chloride
Molecular formula	C ₂₉ H ₃₅ O ₁₇ Cl
Molecular weight	691.01

CERTIFICATE OF ANALYSIS

Appearance	Powder
Thin layer chromatography	support Silicagel
	solvent ethyl acetate / formic acid / water (10/3/2 , V/V/V)
	detection Visible
Absorption maxima	537 nm in methanol + 0.1% HCl
Storage	Store at <-15°C in a dry and dark place.
	Place in a desiccator under vacuum before use

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

Column	Atlantis dC18® (4.6 x 150 mm), particle size 3 µm
Solvent	20 mn linear gradient from 5 to 60% B and 5 mn linear gradient from 60 to 100% B then 5 mn
isocratic 100% B	A=water + 10% formic acid B=methanol
Flow rate	1 ml/min
Detector	UV visible 525 nm
Sample solvent	Methanol + 0.1% HCl



Assay by an HPLC method.

Date of last QC-recheck : March 2012

Date of retest : March 2014

The values given on the 'Certificate of Analysis' are the results determined at the time of analysis.