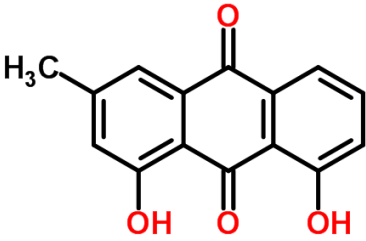


Certificate of Analysis

Product Name	Chrysophanol/ 大黃酚	
Catalog Number	2003	
Lot Number	20031	

Chemical Name	Chrysophanol
Chemical Formula	C ₁₅ H ₁₀ O ₄
Chemical Family	Anthraquinone
Molecular Weight	254.24
CAS Number	481-74-3
Appearance (Color)	Brown
Appearance (Form)	Powder

Analytical Test

Test	Result
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/DAD Analysis	≥ 98.0%

Storage Conditions:

Storage:	Refer to label
Before use:	Keep container tightly closed

TLCM certifies that this standard meets the specifications stated in this certificate and warrants this product to meet the stated criteria. Warranty does not apply after opening.

Date of Certificate: 31/08/2013

Product Analysis Report

Analytical Test

Test	Results
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/DAD Analysis	≥ 98.0%

Spectral and Physical Data

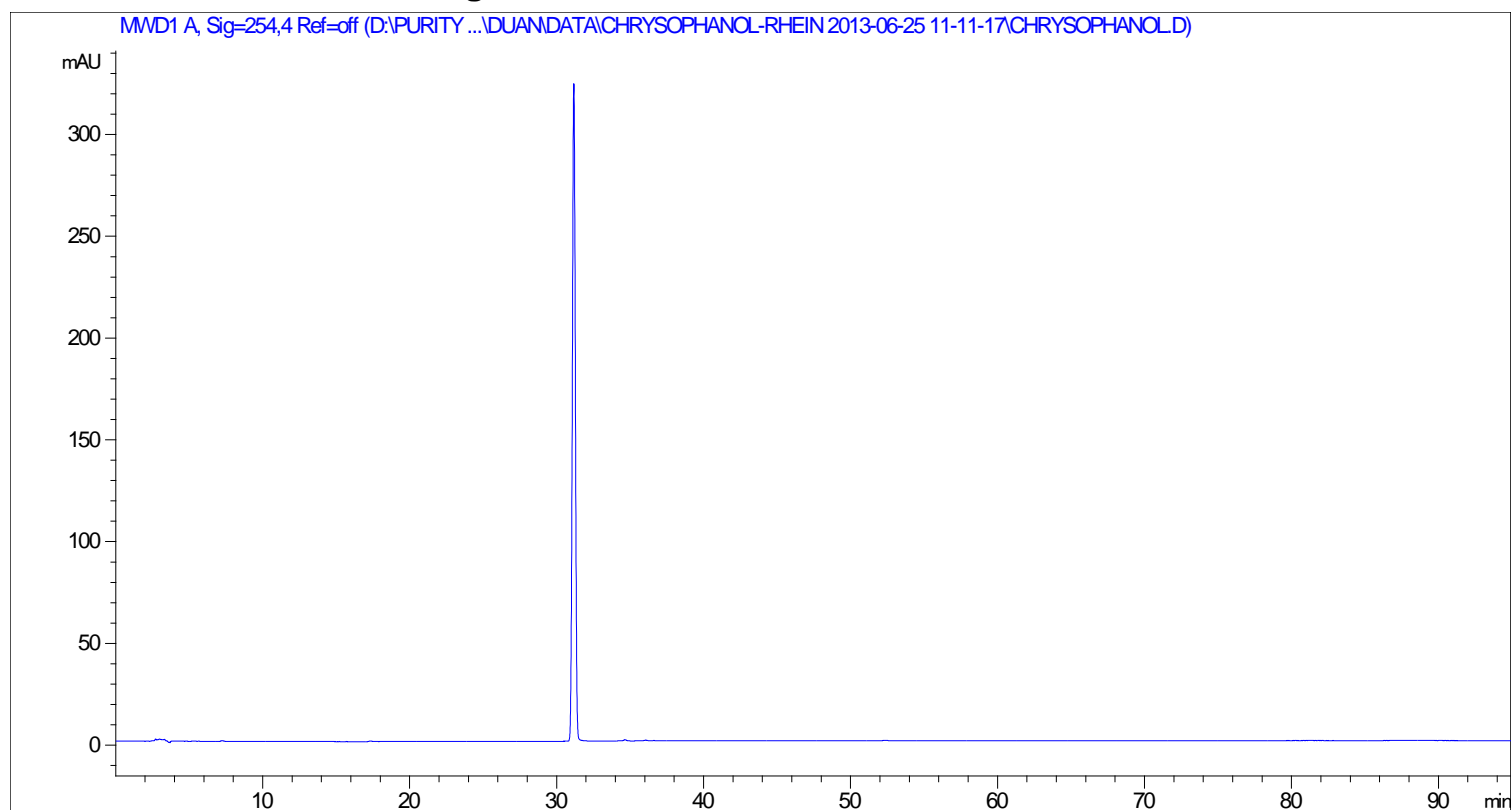
HPLC

HPLC system : Agilent Technologies 1200 Series
Column : Inertsil ODS-4 column, 4.6 x 250 mm, 5 μm
Injection volume : 10 μl
Detector : DAD
Detector wavelength : 254 nm
Flow rate : 1.0 mL/min
Mobile phase :

Time (min)	% 0.1% Phosphoric acid	% ACN	Flow rate (mL/min)
0 → 35	65 → 20	35 → 80	1.0

Date File Name : A3-D:\Chem32\2\purity test\data
Operator : DUAN Ran
Sample Lot Number : 20031
Method File : D:\Chem32\2\method\CHRYSOPHANOL+RHEIN
Acquired : 2013-08-01

I. HPLC chromatogram



Product	RT (min)	Area (mAu*s)	Relative Area %
Chrysophanol	31.175	4603.3	100