**Product Data Sheet** 

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# **PURIFLASH®MS**

## **Mass Directed Purification for the Masses**

- ✓ Mass triggered fraction collection from normal & reverse flash chromatography & prep-LC
- ✓ Mass & Purity confirmation of flash fractions
- √ 100% confidence
- √ Real-time reaction monitoring of batch reactions
- √ The hood-based puriFlash MS reduces the burden on open-access platforms

## **Specification**

Ion Source: APCI (ESI as option, easy switch)

API: orthogonal ion sampling from heated capillary – allows for small single turbo pump (Patents pending)

Flow rate range: 10 µL/min to 500 µL/min Polarity: +ve and –ve ion in sequential analyses

m/z Range: m/z 10 to m/z 1,200 Acquisition rate: 5,000 m/z units sec 1

Resolution: 0.5-0.7 m/z units (FWHM) at 1000 m/z units sec<sup>-1</sup> over entire acquisition range

SIM sensitivity: 10 pg Reserpine (FIA - 5µL injection at 100 µL/min)

100:1 S/N (RMS) with SIM of m/z 609.28

Scan sensitivity: 100 pg Reserpine (FIA - 5µL injection at 100 µL/min) 100:1 S/N (RMS) with full-scan acquisition of m/z 100 to m/z 1200

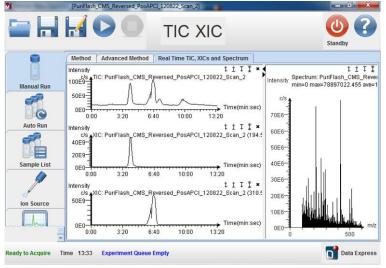
Accuracy: \*/- 0.1 m/z units over entire acquisition range

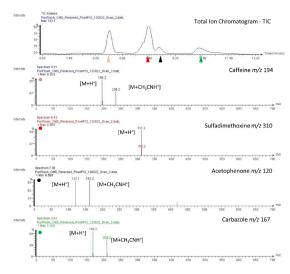
Stability: +/- 0.1 m/z units 12 hours in temperature controlled environment (21 +/- 3 °C)

PURIFLASH®MS **M**interchin

The puriFlash MS push the mass specs boundaries for Identification, separation & purification to chemists fume hoods.

## Spectra @ individual time point





INTERFINE CHEMICALS

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### Normal-Phase - APCI/MS Application

50mg/mL standard of caffeine, acetophenone and carbazole in DMSO

puriFlash® column15µm Silica HC 120G Gradient method used (24.08 minutes)

2mL injection (0.3g total loaded on-column)

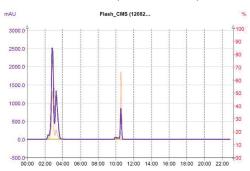
MRA valve set to 31: 4000:1 (15mL/min transfer rate)

Eluent make up – Acetonitrile + 0.1% formic acid

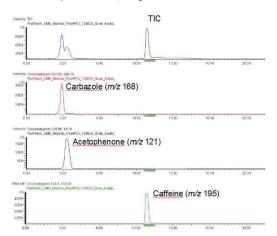
Time	% DCM	% MeOH
0:00	100	0
5.22	100	0
13.25	0	100
18.33	0	100
18.46	100	0
24.08	100	0

Eluent make-up flow rate: 100µL/min

MS Parameters: m/z 100 - 600; 3000ms scan time; Corona 3mA



Purple trace - 254nm; Orange trace - 280nm



### Reversed-Phase - APCI/CMS Application

50mg/mL standard of caffeine, sulfadimethoxine, acetophenone and carbazole in DMSO

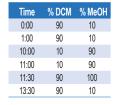
puriFlash® column 15µm C18 HP 20G Gradient method used (13.5 minutes)

1mL injection (0.2g total loaded on-column)

MRA valve set to 11: 500:1 (40mL/min transfer rate)

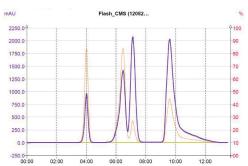
Eluent make up - Acetonitrile + 0.1%

formic acid



Eluent make-up flow rate: 100µL/min

MS Parameters: m/z 100 - 600; 3000ms scan time; Corona 3mA



Purple trace - 254nm; Orange trace - 280nm

