

An open white carrying case containing a CD-ROM, two manuals, and several blue plastic components. The case is positioned in the foreground, partially overlapping the blue banner.

## MEPS™ Online – The SPE solution for your CTC platform

This solution pack provides all the hardware, software and support needed to add online SPE capability to your CTC platform, using the MEPS™ SPE system.

- Get SPE online fast; includes macros, object manager and holders for easy installation and setup
- Contains over 60 applications in key areas of Pharma, DAU and Environmental

PATENT PENDING



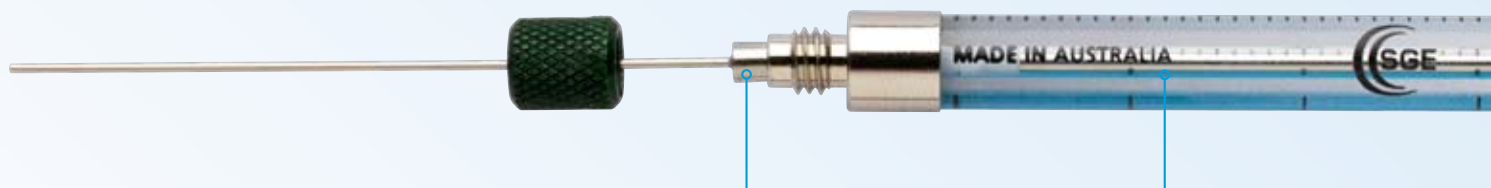
SciSEP Accurate Science

...CTC ANALYTICS



[www.sge.com](http://www.sge.com)

## The MEPS™ SPE Solution



### Exchangeable MEPS™ SPE BIN

- Available in C18, C8, C2, Silica and a mixed bed of C8/SCX

### MEPS™ Syringe

- Designed to integrate with CTC
- Available in 100 µL and 250 µL

MEPS™ (Micro Extraction by Packed Sorbent) is a new development in the fields of sample preparation and sample handling. MEPS™ is the miniaturization of conventional SPE packed bed devices from milliliter bed volumes to microliter volumes.

MEPS™ performs the same functions as SPE – the removal of interfering matrix components

and the selective isolation and concentration of analytes.

### Sample Size and Sensitivity

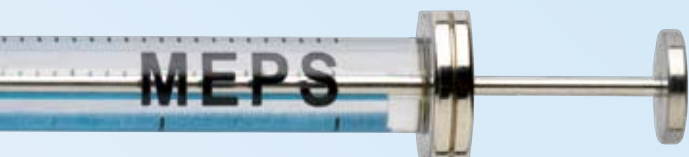
Sample volumes may be as little as 10 µL, or by taking multiple aliquots of 100 µL or 250 µL, samples of 1 mL or larger may be concentrated.

## What is in the MEPS™ Online kit?

- 1x 100 µL SGE MEPS™ syringe.
- 1x 250 µL SGE MEPS™ syringe.
- 2 packages of MEPS™ Development BIN's – containing one each of C18, C8, C2, Silica and a mixed bed of C8/SCX.
- CTC MEPS™ encoded syringe holder for 100 µL MEPS™ syringe.
- CTC MEPS™ encoded syringe holder for 250 µL MEPS™ syringe.
- CTC syringe button mount.
- MEPS™ for CTC analytics support guides:
  - Methods and applications.
  - MEPS™ macros for the CTC.
  - MEPS™ instruction videos.
- Over 65 pre-set methods spanning Natural Products, Environmental, Food & Beverage and Pharmaceuticals to enable rapid method development, in a variety of matrices; plasma, serum, whole blood, urine, aqueous.



*Note: Existing CTC platforms will require an additional wash station available from your CTC distributor.*



### Sorbent Life

Typical BIN life for extraction of whole plasma sample is conservatively about 40 to 100 samples. This significantly increases for cleaner samples.

### Carry Over

The small quantity of phase in the MEPS™ BIN can be easily and effectively washed between samples to reduce the possibility of carryover.

### Flexible and easy to use

The dimensions of the sorbent bed ensure that the performance remains identical to conventional SPE devices when used for extraction of similar samples. MEPS™ BINS can be used for sample volumes as small as 3.6 µL making them particularly well suited to on-line use with LC-MS analysis of volume limited samples.

#### ALKALOIDS

- A01 3,4-Diaminopyridine from Urine (Lambert-Eaton)
- A02 Alkylbenzyl Dimethylammonium Chlorides from Plasma
- A03 Amino Acids from Urine
- A04 Basic Nucleosides from Aqueous Solution
- A05 Bio-flavonoids from Red Wine
- A06 Casuarine in Plant Extract
- A07 Catecholamines from Urine
- A08 Cyclodextrins from Plasma
- A09 Cyclodextrins from Urine
- A10 Dipterox in Serum
- A11 Diterpene Glycosides from Tea Extract
- A12 Fatty Acids from Serum
- A13 Homovanillic Acid from Plasma
- A14 Isoflavones from Plant Extract
- A15 Mixed Aromatic Amines from Urine and Plasma
- A16 Nicotine and Cotinine from Plasma
- A17 Nucleosides from Aqueous Solution
- A18 Nucleosides from Plasma
- A19 Nucleosides from Urine
- A20 PEG 400 in Serum
- A21 Persistent Organic Pollutants PAH, PCB and Pesticides in Blood
- A22 Persistent Organic Pollutants PAH, PCB and Pesticides in Plasma
- A23 Persistent Organic Pollutants PAH, PCB and Pesticides in Serum
- A24 Pesticides and PCB in Fats
- A25 Phenylalanine from Plasma
- A26 Prostaglandins from Urine
- A27 Prostaglandins from Whole Blood
- A28 Salsoline from Plasma
- A29 Steroid Acids from Serum
- A30 Tryptophan from Plasma
- A31 Vanillylmandelic Acid from Plasma
- A32 Xanthines (Caffeine) from Serum
- A33 Xanthines (Theophylline) from Serum

#### ENVIRONMENTAL

- E01 Carbamate Insecticide (Aldicarb) from Water
- E02 PAH and PCB in Contaminated Soil
- E03 Phenols in water
- E04 Phthalate Esters in Water
- E05 S-triazine Herbicide (Atrazine) in Soil

#### FOOD & BEVERAGE

- F01 Aflatoxin B2 and M2 Metabolite Trace Analysis in Milk
- F02 Chloroacetanilide Herbicides (Acetochlor and Metolachlor) in Contaminated Water
- F03 F-2 Mycotoxin Trace Analysis in Cereal
- F04 Fatty Acid Methyl Esters (Long Chain) in Fermentation medium
- F05 Omega 6 Fatty Acid in Malt Lipid Fractions
- F06 Pigment Anthocyanidins in Wine
- F07 S-triazine Herbicide (Atrazine) in Cereal
- F08 Sulfonamide Trace Analysis in Meat

#### PHARMACEUTICALS

- P01 Acetazolamide and Bumetanide in Urine
- P02 Acetazolamide in plasma
- P03 Amiodarone, Fendiline and Procainamide in Serum
- P04 Amphetamine in Plasma
- P05 Analgesics in Serum; Paracetamol and Tramadol
- P06 Anesthetics in Serum; Benzocaine, Mepivacaine, Procaine and Lidocaine
- P07 Antidepressants (Tricyclics) in Blood
- P08 Antidepressants (Tricyclics) in Urine
- P09 Atenolol in Plasma
- P10 Barbiturates in Serum; Barbitol, Amobarbital, Phenobarbital, Secobarbital
- P11 Barbiturates in Urine; Barbitol, Amobarbital, Phenobarbital, Secobarbital
- P12 Carbamazepine, Phenobarbital and Primidone in Serum
- P13 Chloramphenicol in Eye Drops
- P14 Cimetidine in Plasma
- P15 Cyclosporin in Blood
- P16 Erythromycin and Clarithromycin in Urine
- P17 Minor Tranquilizers (Benzodiazepines) in Urine or Serum
- P18 Minor Tranquilizers (Diazepam and Lorazepam) in Hair
- P19 Opiate Analgesics in Blood; Morphine and Codeine
- P20 Propranolol in Serum
- P21 Stobadin from Serum
- P22 Vitamin A, D and E in Supplements
- P23 Vitamin D3 and Metabolites in Serum

## Contact and ordering information

The MEPS™ Online kit is the product of a collaboration between SGE Analytical Science who developed the MEPS™ product, CTC Analytics who provide the platform for automation of the MEPS™ concept and SciSEP who develop and support the MEPS™ application on the CTC platform.

The MEPS™ Online kit can be ordered through SciSep (UK only), or any authorized CTC distributor.

### MEPS™ Online Kit

| P/N    | Description | # per pack |
|--------|-------------|------------|
| 492901 | GC-PAL kit  | 1          |
| 492902 | LC-PAL kit  | 1          |

### MEPS™ Online Replacement Syringes

All syringes may be used manually as well as with the CTC autosampler

| P/N    | Description   | # per pack |
|--------|---|------------|
| 005291 | 100 µL Removable needle MEPS™ syringe for CTC Analytics systems | 1          |
| 031826 | Replacement plunger assembly for 005291                         | 1          |
| 006292 | 250 µL Removable needle MEPS™ syringe for CTC Analytics systems | 1          |
| 031831 | Replacement plunger assembly for 006292                         | 1          |

### MEPS™ Online Replacement BINS

FOR GC APPLICATIONS, needle is 23 gauge, 0.63 mm OD, Cone point style

| Phase  | For use with 100 µL<br>MEPS™ Syringe, P/N | For use with 250 µL<br>MEPS™ Syringe, P/N | # per pack |
|--|---|---|------------|
| C18  | 2900101                                   | 2900301                                   | 5          |
| Silica   | 2900102                                   | 2900302                                   | 5          |
| C8+SCX   | 2900103                                   | 2900303                                   | 5          |
| C2   | 2900104                                   | 2900304                                   | 5          |
| C8   | 2900106                                   | 2900306                                   | 5          |
| MEPS™ Development kit for CTC Analytics systems<br>(contains 1 each of C18, C8, C2, SILICA and C8+SCX) | 2900105                                   | 2900305                                   | 5          |

FOR LC APPLICATIONS, needle is 22 gauge, 0.72 mm OD

| Phase  | For use with 100 µL<br>MEPS™ Syringe, P/N | For use with 250 µL<br>MEPS™ Syringe, P/N | # per pack |
|--|---|---|------------|
| C18  | 2900401                                   | 2900501                                   | 5          |
| Silica   | 2900402                                   | 2900502                                   | 5          |
| C8+SCX   | 2900403                                   | 2900503                                   | 5          |
| C2   | 2900404                                   | 2900504                                   | 5          |
| C8   | 2900406                                   | 2900506                                   | 5          |
| SCX  | 2900408                                   | 2900508                                   | 5          |
| SAX  | 2900409                                   | 2900509                                   | 5          |
| MEPS™ Development kit for CTC Analytics systems<br>(contains 1 each of C18, C8, C2, SILICA and C8+SCX) | 2900405                                   | 2900505                                   | 5          |

Base material is silica with mean particle size of 45 µm and pore size of 60 Å.

Distributor Stamp

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