OASIS® MAX PRODUCT AND GENERIC METHOD INFORMATION

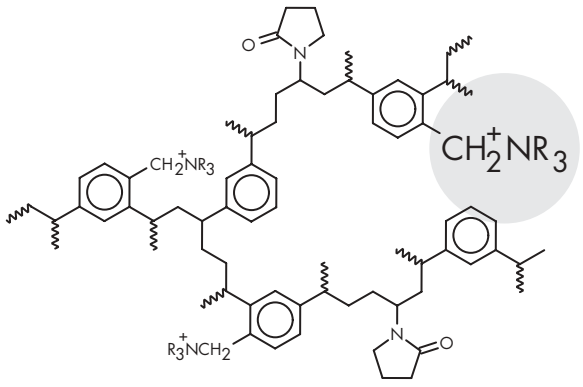
I. INTRODUCTION

Oasis® MAX extraction products are available in cartridges and 96-well plates as listed in the ordering information. These products contain a mixed-mode polymeric (patented) sorbent in 30 µm or 60 µm large particle size with reversed-phase and anion-exchange functionalities. Strong anion-exchange quaternary amine groups (0.25 meq/g dimethylbutylamine) are on the surface of a poly (divinylbenzene-co-N-vinylpyrrolidone) copolymer. The major difference between the Oasis® HLB and MAX sorbents is the presence of the anion-exchange groups that provide high selectivity for acidic compounds.

The anion-exchange groups impart high selectivity for acidic drugs allowing you to obtain clean extracts from urine, whole blood, serum, plasma, soils, and water for analysis by HPLC, GC, GC-MS, or LC/MS. The mixed-mode Oasis® MAX sorbent gives high and reproducible recoveries for acidic, basic, and neutral compounds—even if the cartridge runs dry. Therefore, the Oasis® MAX cartridges can be used to extract drugs for monitoring, screening, confirmation, and quantitation. The two available particle sizes allow you to select the appropriate product based on the viscosity and turbidity of your sample. For viscous samples, excellent flow can be achieved using the 60 µm large particle size sorbent in either cartridges or plates.

The Certificate of Analysis (COA) also contained in this package reports recoveries with RSDs for the weakly acidic drug secobarbital, the basic drug nortriptyline, and three acidic drugs salicylic acid, ketoprofen and naproxen isolated according to the method in Section A. The COA displays results from stringent quality control tests on the batch of polymer sorbent and the lots of packed cartridges.

FIGURE 4: STRUCTURE OF OASIS® MAX SORBENT



SECTION A: GENERIC SPE PROCEDURE FOR OASIS® MAX SORBENT

The Quick Start SPE Procedure for Oasis® MAX sorbent (Table 3) is an excellent starting point for any method. Methods developed on the 1 cc/30 mg cartridges are directly transferable to the 30 mg/well 96-well extraction plates. The procedure also applies to the other 96-well plates as well as µElution plates (refer to recommended volume for generic methods, pg 15).

TABLE 3

NOTE: If necessary, clarify the samples by centrifugation at 8000 X g for 20 minutes prior to loading on the cartridge.

STEPS FOR 1 cc/30 mg CARTRIDGES	PURPOSE
CONDITION/EQUILIBRATE 1 mL methanol/1 mL water	Prepares sorbent for use. Optional step in extracting acidic drugs from human urine and plasma.
LOAD 1 mL spiked and acidified plasma or urine	At low pH, bases are ionized and acidic and neutral compounds are neutral. All analytes are retained by reversed-phase interactions. Note: Acidic analytes typically bind strongly to matrix proteins. To break these interactions, acidify (< pH 2.5) samples prior to loading.
WASH 1 1 mL pH 7, NaOAc 50mM/ MeOH (95/5)	Removes proteins and locks acidic drugs to sorbent by ion-exchange mechanism.
ELUTE 1 or WASH 1 mL 100% MeOH	Removes interferences retained by hydrophobic interaction. Can be used as an elution step for neutral and acidic compounds, if desired.
ELUTE 2 1mL 2% formic acid in methanol	Elutes most acidic analytes of interest.
EVAPORATE AND RECONSTITUTE in 100 µL of an appropriate solvent or solution (optional)	Concentrates sample and/or changes solvent for analysis.