

## Oasis Sample Extraction Products: Chemistry and Formats

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Waters Corporation



This is an Application Brief and does not contain a detailed  
Experimental section.

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### Abstract

This application brief highlights Oasis sample extraction products chemistry and formats

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## Introduction

The patented design of the Oasis family of solid-phase extraction products, along with a diverse selection of chemistries and formats, provide bioanalytical scientists with the needed selectivity to achieve the sensitivity that their assays require.

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## Results and Discussion

### Oasis Sorbent Chemistries

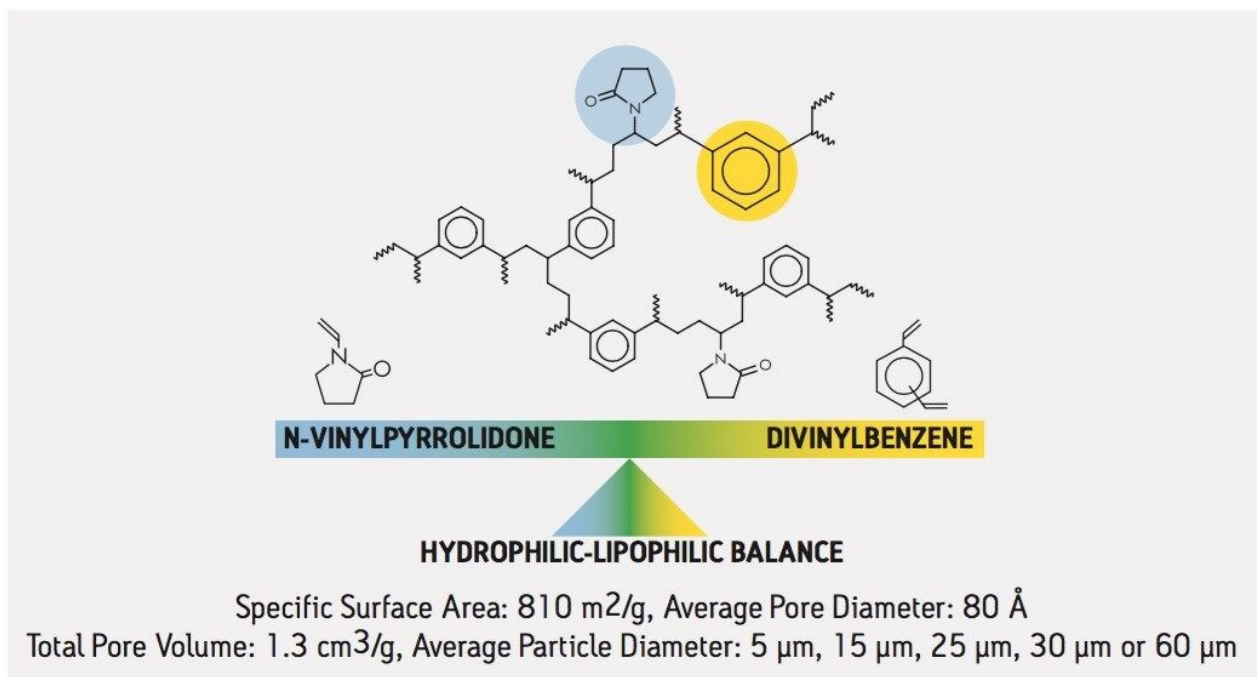
#### Oasis HLB

- Hydrophilic-Lipophilic-Balanced, water-wettable, reversed-phase sorbent.
- Universal sorbent for acidic, basic, and neutral compounds.

Oasis HLB is a hydrophilic-lipophilic-balanced, water-wettable, reversed-phase sorbent for all your SPE needs. It is made from a specific ratio of two monomers, hydrophilic N-vinylpyrrolidone and lipophilic divinylbenzene. It provides superior reversed-phase capacity with a neutral polar 'hook' for enhanced retention of polar analytes.

Water-wettable Oasis sorbents exhibit excellent retention capacity for a wider polarity spectrum of analytes, even if the sorbent bed runs dry during conditioning or sample loading. This means that your SPE methods will be more rugged and robust, precluding the need for repeat sample preparation.

## Unique Water-Wettable Oasis HLB Copolymer

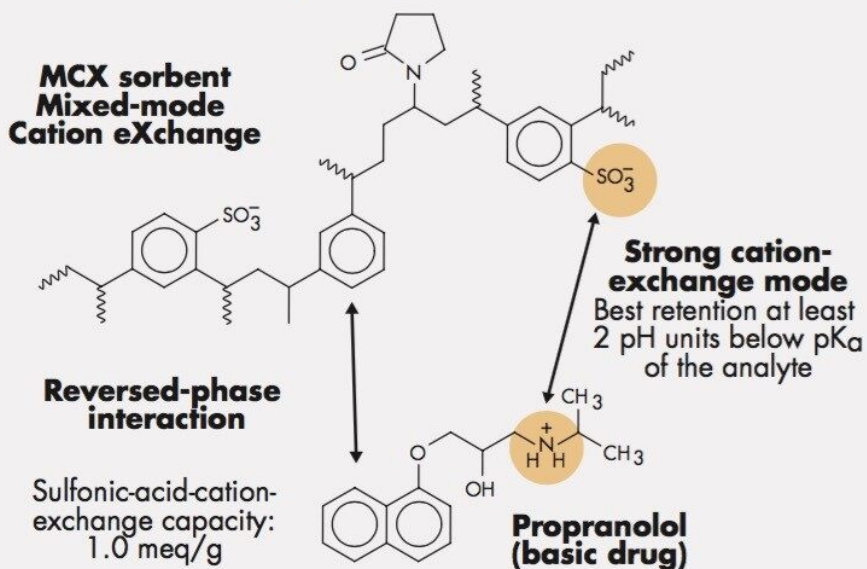


### Oasis MCX

- Mixed-Mode Cation-eXchange and reversed-phase sorbent
- High selectivity and sensitivity for basic compounds

Oasis MCX, for basic compounds, provides dual modes of retention— cation exchange, and reversed phase—on a single, clean, stable, high-surface-area, organic co-polymer that is stable from pH 0-14. The ability to fully manipulate pH during the development, optimization, and use of SPE methods on mixed-mode sorbents enables not only fast, straightforward-method development, but also ensures very rugged and robust procedures.

Highly selective retention enables much stronger washes,  
resulting in very clean extracts.



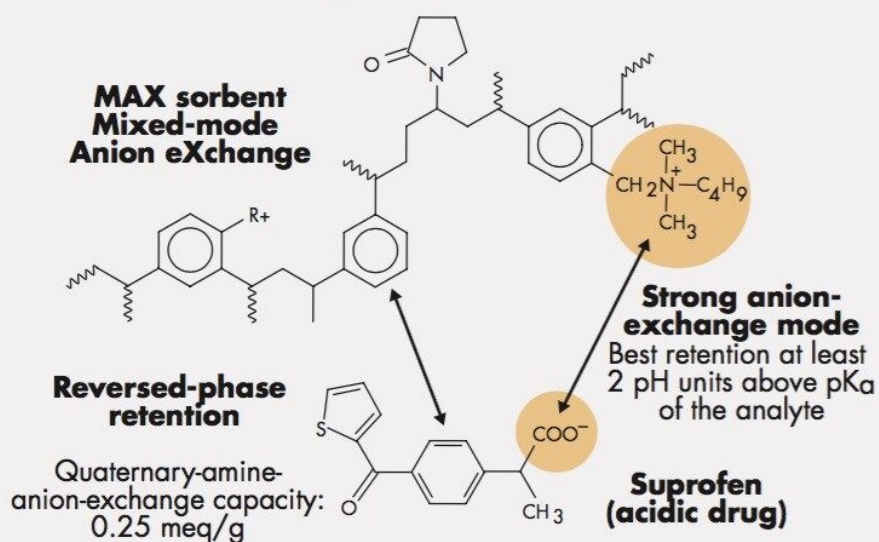
#### *Drug-Sorbent Interactions on Oasis MCX Sorbent*

##### Oasis MAX

- Mixed-Mode Anion-eXchange and reversed-phase sorbent
- High selectivity and sensitivity for acidic compounds

Oasis MAX is a strong mixed-mode anion-exchange, water-wettable, polymeric sorbent stable from pH 0-14. Now you can employ reliable SPE in methods to detect, confirm, or quantify acidic compounds and/or acidic metabolites in biological fluids. SPE procedures using the selectivity and ruggedness of Oasis MAX sorbent enable separation of analytes from complex matrices.

Highly selective retention enables much stronger washes,  
resulting in very clean extracts.



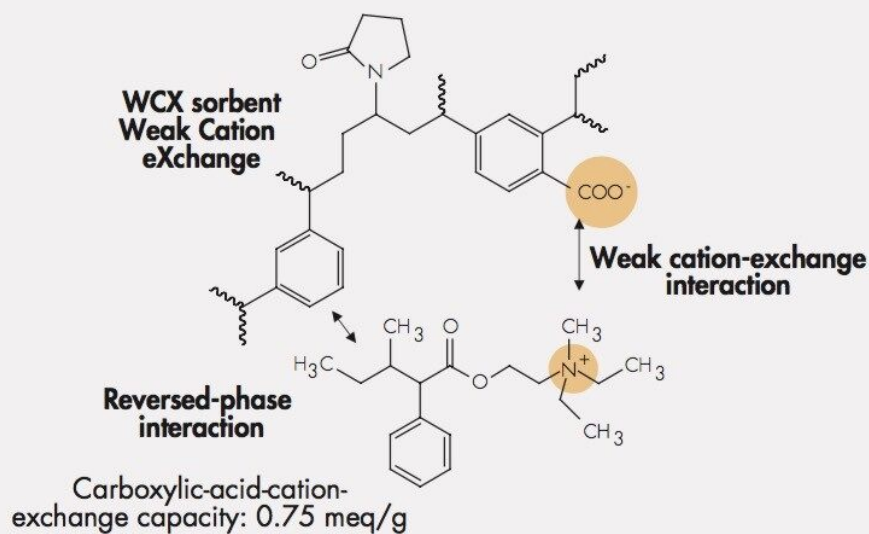
#### Drug-Sorbent Interactions on Oasis MAX Sorbent

##### Oasis WCX

- Mixed-Mode Weak Cation-eXchange and reversed-phase sorbent
- High selectivity and sensitivity for strongly basic compounds

The Oasis WCX sorbent is designed to provide superior sample preparation for strong bases and quaternary amines. It is a weak cation-exchange, mixed-mode, water-wettable, polymeric sorbent, stable from pH 0-14. Rugged and highly selective SPE methods using Oasis WCX sorbent detect, confirm, and quantify strongly basic compounds and quaternary amines in biological fluids.

**Highly selective retention enables much stronger washes,  
resulting in very clean extracts.**



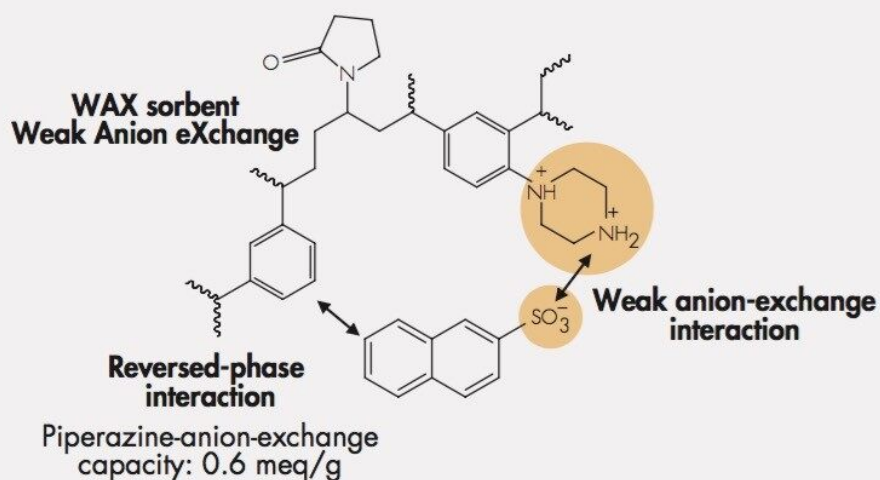
#### *Drug-Sorbent Interactions on Oasis WCX Sorbent*

##### Oasis WAX

- Mixed-Mode Weak Anion-eXchange and reversed-phase sorbent
- High selectivity and sensitivity for strongly acidic compounds

The Oasis WAX sorbent is designed to provide superior sample preparation for strong acids. It is a weak-anion-exchange, mixed-mode, water wettable, polymeric sorbent, stable from pH 0 to 14. Rugged and highly selective SPE methods using Oasis WAX detect, confirm, and quantify strongly acidic compounds in biological fluids.

**Highly selective retention enables much stronger washes,  
resulting in very clean extracts.**



*Drug-Sorbent Interactions on Oasis WAX Sorbent*

## Conclusion

### $\mu$ Elution 96-Well Plates

- Patented  $\mu$ Elution plate design
- Enabling technology facilitates elution volumes as low as 25  $\mu$ L
- Provides up to 15X concentration of samples without evaporation and reconstitution

### 96-Well Extraction Plates

- Innovative two-stage well design
- High throughput and high recovery
- Available in 5 mg, 10 mg, 30 mg, and 60 mg per well

### Syringe-Barrel Cartridges

- Ultra-clean syringe barrel and frits
- Available in 1 cc to 3 cc cartridges (including 1 cc and 3 cc flangeless cartridges)

- Available from 10 mg to 60 g of sorbent per cartridge

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## Featured Products

720003678, September 2010

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