

## **Jordi SPE Quality Assurance**

The Jordi SPE Media is manufactured using the same high quality 100% divinylbenzene packing's that have been in continuous production for over 25 years. We only use the highest quality resins for all of our SPE products. The Jordi team takes great pride in providing batch to batch consistency of all the media produced. The quality control for all of Jordi's materials include:

- *Particle Size - Electrozone sensing analysis of particle size distribution*
- *Particle Shape - Light microscopy analysis of particle shape and size*
- *Chromatographic Performance - Column Chromatography*
- *Purity - Mass Spectroscopy (MS)*



Excellence in Materials Analysis and LC Products

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**JORDI**



**JORDI  
Solid  
Phase  
Extraction  
(SPE)**

# JORDI Solid Phase Extraction (SPE)

## Introduction

Jordi FLP is a family business with over 25 years of experience in the Chromatography field. Jordi has a long history of producing the finest 100% divinylbenzene polymeric chromatographic resins. Jordi also offers a complete analytical service laboratory. The high quality resins produced by Jordi, and the ability of those resins to perform very difficult separations, have provided significant growth in our media segment. The primary use of this proprietary technology has been in the Gel Permeation Chromatography field.

Over the last number of years, Jordi has made significant progress in the understanding of the Jordi media for use in an SPE format. We will explore below the benefits that you will find using the Jordi Polymeric SPE media.

## SPE Overview

Solid Phase Extraction (SPE) is an essential tool for the analysis of a broad range of sample types. The significance of SPE is in the importance of removing interferences, concentrating the analyte of interest and preventing damage to costly analytical columns

and instrumentation. SPE is an extremely attractive sample preparation tool because it replaces the more time consuming methods such as liquid-liquid extractions, centrifugation and precipitation, not to mention time and cost savings.

The benefits of polymeric SPE media as compared to silica, have only recently become apparent and has led to broad acceptance for its use in many important analyses including drug recovery.

## Advantages of Polymeric SPE

- Outstanding recovery due to the highly retentive nature of polymeric phases.
- Absence of leachables from the polymeric media since there is no bonded phase
- Lack of residual silanol groups
- Incredible durability of polymeric supports allows wide pH and solvent compatibility
- Batch to Batch reproducibility
- Higher capacity for improved detection limits and reduced resin volumes.

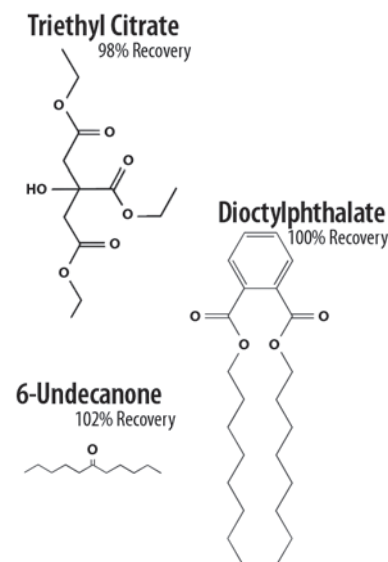
## Jordi SPE Performance

Jordi provides a 10 $\mu$  average particle size as compared to the typical 40 $\mu$  of its competitors.

This particle size was chosen due to it's performance benefits over the larger particle size, primarily the extremely high retention efficiencies, and higher capacities.

The retention efficiency of an SPE cartridge refers to the ability of the cartridge to effectively retain

the desired analytes from the sample. Larger particle sizes allow the analyte to break through during the sample application. The competition's use of a 40 $\mu$  material produces less useful surface area, allowing the analytes to avoid contact with the sorbents, thus minimizing retention.



In contrast, the Jordi 10 $\mu$  material provides the exact opposite effect. Our smaller material creates a significantly larger useful surface area, while maintaining excellent flow characteristics, which forces the analyte molecules to come in contact with the sorbent as it passes over the bed of the SPE column. This contact of the analyte with the sorbent ultimately allows for a more efficient and consistent retention and more reproducible results.