
















Suggested SPE method for the extraction of Phenolic compounds from wine using SiliCycle® SiliaPrep™ C18 (17 %)

We describe here a sample preparation method for the extraction of “phenolic compounds from wine” using **SiliaPrep™ C18 (17 %)** base on hydrophobic retention of the interfering wine components. Analysis of the sample can be done using the analytical technique GC-MS.

This is a recommended sample preparation method, however, this method have not been verified in SiliCycle laboratories but is based on methods used with similar matrices and analytes. Therefore, before trying the procedure directly on the matrix, you should first develop a procedure using pure solvent containing the analyte. You will find below, tips for the choice of solvent that you should use to establish your SPE method development:

EXTRACTION PROCEDURE

 SPE Cartridge type:	<ul style="list-style-type: none"> ● SiliCycle® SiliaPrep™ C18 (17 %) (500 mg, 6 mL) <i>PN : SPE-R30230B-06P</i>
<p>Note: Other SPE volumes and sorbent bed weights can be used for the extraction of this compound depending on the analyte concentration.</p>	
 Analyte structure:	<ul style="list-style-type: none"> ● Phenolic compounds
 Sample pre-treatment:	<ul style="list-style-type: none"> ● Not required
 SPE extraction using SiliaPrep™ C18 (17 %):	<ul style="list-style-type: none"> ● Column conditioning step <ul style="list-style-type: none">  Solvent 1: 5 mL of a MeOH  Solvent 2: 5 mL of H₂O ● Sample loading <ul style="list-style-type: none">  Load directly on the top of the cartridge wine sample ● Interferences washing step <ul style="list-style-type: none">  <u>Not done</u> ⇒ Interfering components retention SPE mechanism ● Phenolics compounds elution step <ul style="list-style-type: none">  Solvent: 1-5 mL of Isopropyl alcohol
 Analytical method:	<ul style="list-style-type: none"> ● Generally analysed by GC-MS.
 Reagents used:	<ul style="list-style-type: none"> ● For this extraction method you will need: <ul style="list-style-type: none">  Isopropyl alcohol  Methanol  Water (H₂O)
 General comments:	<ul style="list-style-type: none"> ● If the interfering components are not retained adequately, used higher or lower carbone % SiliaPrep™ C18 functionalized silica gel.