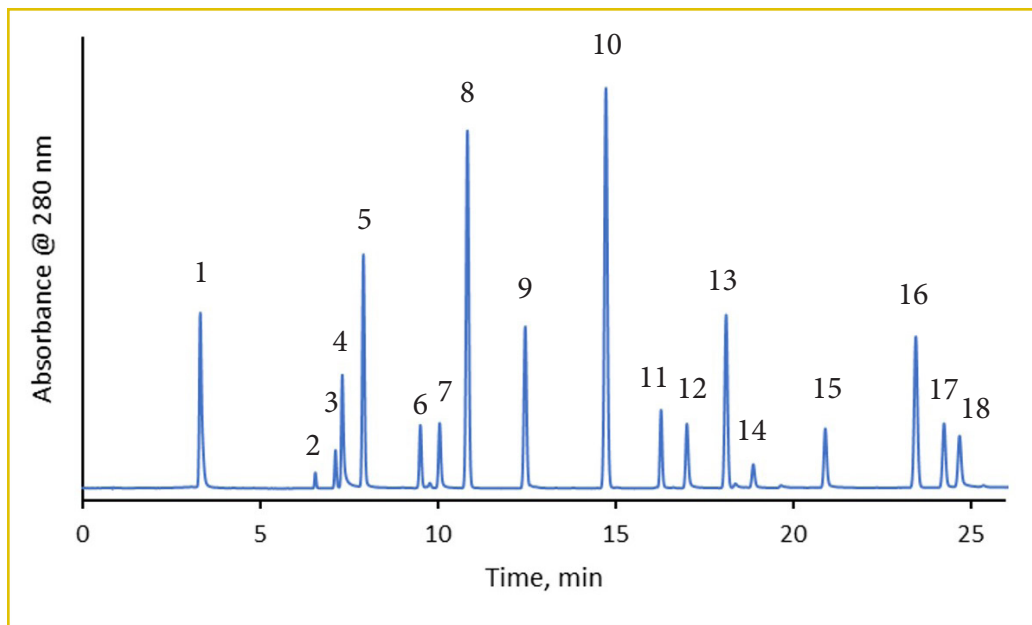




## Separation of Polyphenols in Wine

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### PEAK IDENTITIES

1. Gallic Acid
2. Epigallocatechin
3. Chlorogenic Acid
4. Catechin
5. Caffeic Acid
6. Epicatechin
7. Epigallocatechin Gallate
8. p-Coumaric Acid
9. Ferulic Acid
10. o-Coumaric Acid
11. Quercitrin
12. Myricetin
13. Resveratrol
14. Morin
15. Quercetin
16. Naringenin
17. Apigenin
18. Kaempferol

### TEST CONDITIONS:

**Column:** HALO 90 Å LPH-C18, 2.7  $\mu\text{m}$  2.1 x 100 mm

**Part Number:** 92822-616

**Mobile Phase A:** Water/ 0.1% Formic Acid

**Mobile Phase B:** Acetonitrile/ 0.1% Formic Acid

Gradient:	Time (min)	%B
	0.0	0
	3.5	8
	7.1	10
	25.0	30
	26.0	40
	27.0	100
	29.0	100
	30.0	0
	35.0	0

**Flow Rate:** 0.3 mL/min

**Pressure:** 159 bar

**Temperature:** 30 °C

**Detection:** UV 280 nm, PDA

**Injection Volume:** 0.7  $\mu\text{L}$

**Sample Solvent:** Water

**Data Rate:** 100 Hz

**Response Time:** 0.025 sec.

**Flow Cell:** 1  $\mu\text{L}$

**LC System:** Shimadzu Nexera X2

Polyphenols can be found in a wide variety of plant-based foods and are packed with antioxidants and potential health benefits. There are more than 8,000 of these types of compounds which contain multiples of phenol units. Common polyphenols found in wine are separated using a HALO 90 Å LPH-C18 column using analytical standards. This stationary phase contains a sterically protected ligand which is ideal for high stability under low pH conditions.

