

Reduced Graphene Oxide Aerogels Cartridges for Solid Phase Extraction of Benzotriazoles

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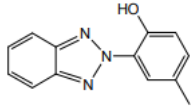
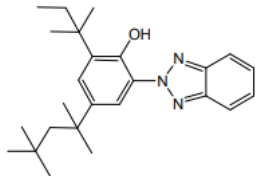
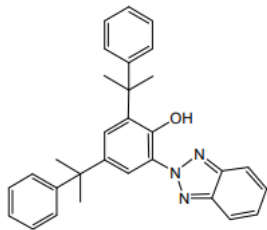
Supplementary Material

Table S1. Analytical features of the proposed HPLC method for the quantitative analysis of UV-benzotriazoles dissolved in the best extraction solvent (THF).

Analyte	Range (ng mL ⁻¹)	Equation	R ²	LOQ ^b (ng mL ⁻¹)	LOD ^a (ng mL ⁻¹)
UVP	25-4000	$y = 1.45 \cdot 10^{-6}x^2 + 0.0424x - 1.2644$	0.9990	2.23	1.1
UV329	25-4000	$y = 1.16 \cdot 10^{-6}x^2 + 0.0256x - 0.0503$	0.9998	2.44	0.95
UV234	25-4000	$y = 7.63 \cdot 10^{-7}x^2 + 0.0201x + 0.0405$	0.9992	2.13	0.82

^a Limit of detection. ^b Limit of quantification

Table S2. Properties of the UV-benzotriazoles used in this study.

Benzotriazole	Molecule	Molecular Weight	Log K _{ow}
UVP		225.2	4.33
UV329		323.4	6.21
UV234		447.57	7.67

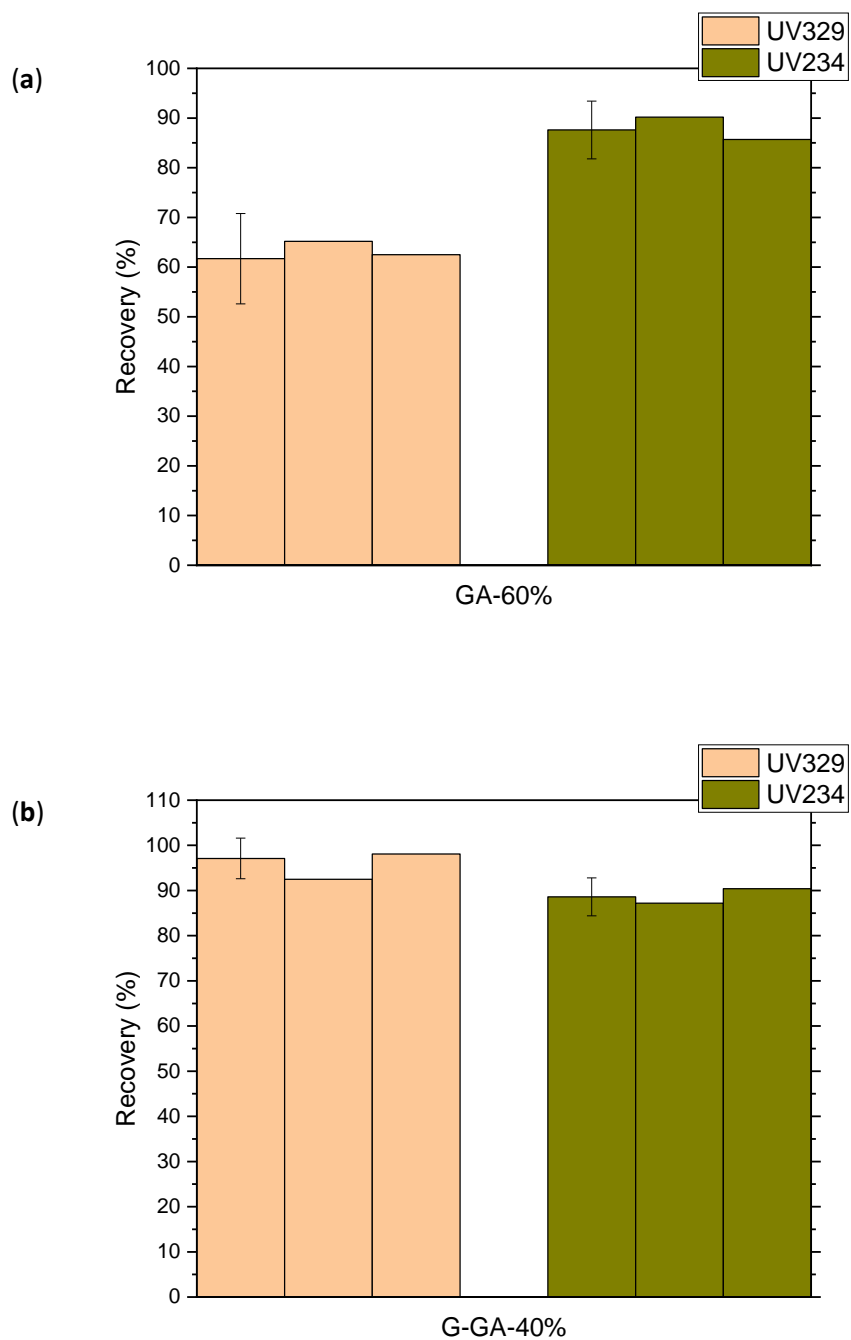


Figure S1. Recovery values of (a) GA-60% and (b) G-GA-40% cartridges after three consecutive reuses (see Experimental Section 2.3 for details).

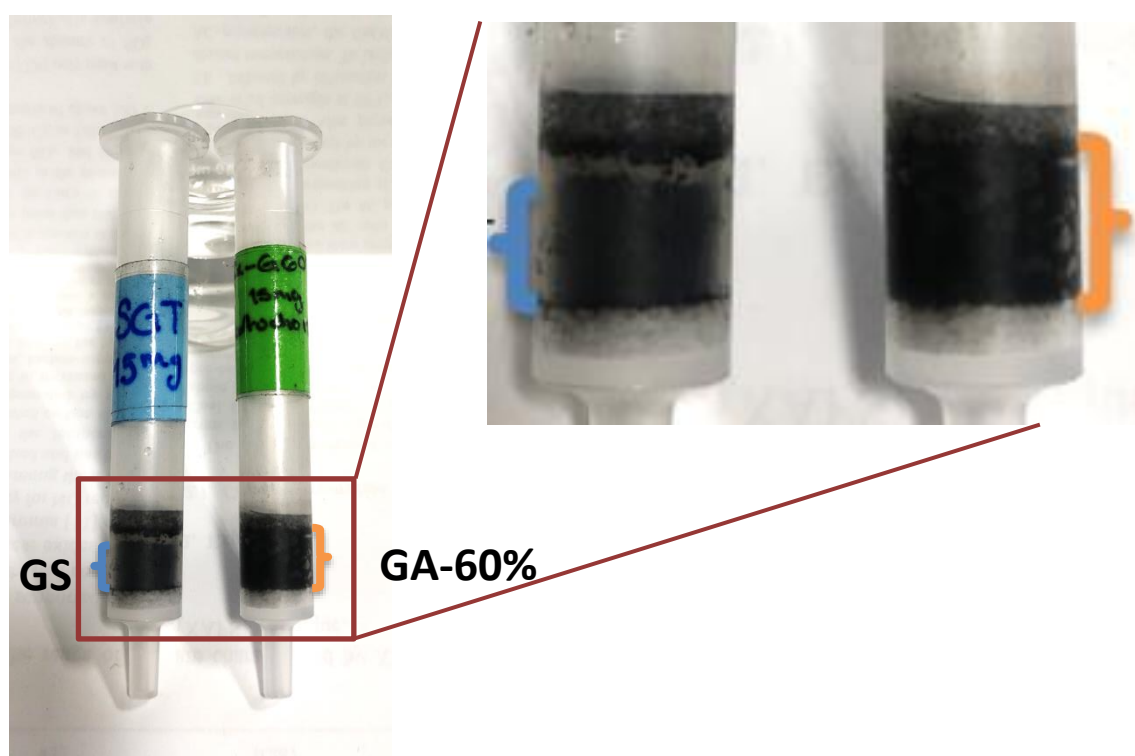


Figure S2. Physical aspect of GS and GA-60% SPE cartridges after loading and elution of samples. The GS sample is irreversibly compacted after use whereas the GA-60% preserves the mechanical integrity.