Screening and Classification of Hydrogenated Vegetable Oils using a Combination of SFC-FID, SFC-MS and GCxGC-MS.

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Table S1: SFC-FID Composition make-up for each of the undiluted HVOs analysed in triplicate.

Sample	Class	Rep 1	Rep 2	Rep 3	Average	Standard Deviation
HVO 1	Polar	N.D.	N.D.	N.D.	N.D.	-
	Saturates	100.0%	100.0%	100.0%	100.0%	0.0%
	Aromatic	N.D.	N.D.	N.D.	N.D.	-
HVO 2	Polar	N.D.	N.D.	N.D.	N.D.	-
	Saturates	100.0%	100.0%	100.0%	100.0%	0.0%
	Aromatic	N.D.	N.D.	N.D.	N.D.	-
HVO 3	Polar	1.1%	1.2%	1.3%	1.2%	0.1%
	Saturates	98.5%	98.5%	98.3%	98.4%	0.1%
	Aromatic	0.4%	0.3%	0.5%	0.4%	0.1%
HVO 4	Polar	N.D.	N.D.	N.D.	N.D.	-
	Saturates	96.7%	96.9%	96.4%	96.7%	0.3%
	Aromatic	3.3%	3.1%	3.6%	3.3%	0.3%
HVO 5	Polar	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%
	Saturates	99.9%	99.8%	99.8%	99.8%	<0.1%
	Aromatic	0.1%	0.2%	0.1%	0.1%	<0.1%
HVO 6	Polar	1.5%	1.5%	1.5%	1.5%	<0.1%
	Saturates	96.2%	96.3%	96.1%	96.2%	0.1%
	Aromatic	2.3%	2.2%	2.4%	2.3%	0.1%
HVO 7	Polar	0.3%	0.2%	0.2%	0.2%	<0.1%
	Saturates	98.2%	98.1%	98.3%	98.2%	0.1%
	Aromatic	1.6%	1.7%	1.5%	1.6%	0.1%

N.D. – Not detected.

Table S2: GCxGC-MS Composition make-up for each of the diluted HVOs analysed in triplicate.

Sample	Class	Rep 1	Rep 2	Rep 3	Average	Standard Deviation
HVO 1	*iso*-alkane	89.8%	89.8%	89.5%	89.7%	0.2%
	n-alkane	10.2%	10.2%	10.5%	10.3%	0.2%
HVO 2	*iso*-alkane	81.6%	81.3%	81.5%	81.5%	0.2%
	monocyclo-alkane	0.2%	0.1%	0.1%	0.1%	0.0%
	n-alkane	18.2%	18.6%	18.4%	18.4%	0.2%
HVO 3	alcohol	0.6%	0.4%	0.5%	0.5%	0.1%
	aldehyde	0.1%	0.1%	0.1%	0.1%	<0.1%
	FAME	0.0%	0.0%	0.0%	0.0%	<0.1%
	FFA	0.1%	0.1%	0.1%	0.1%	<0.1%
	iso-alkane	1.9%	2.0%	2.1%	2.0%	0.1%
	mono-aromatic	<0.1%	0.1%	<0.1%	<0.1%	<0.1%
	monocyclo-alkane	1.4%	2.1%	1.9%	1.8%	0.4%
	n-alkane	95.9%	95.2%	95.3%	95.5%	0.4%
HVO 4	*bi*- and *tricyclo*-alkane	16.1%	16.1%	17.0%	16.4%	0.5%
	iso-alkane	51.2%	50.0%	50.2%	50.5%	0.7%
	mono-aromatic	1.0%	1.0%	1.1%	1.0%	0.1%
	monocyclo-alkane	13.4%	14.4%	14.1%	13.9%	0.5%
	n-alkane	18.2%	18.5%	17.6%	18.1%	0.5%
	polycyclo-alkanes	<0.1%	0.1%	0.1%	0.1%	<0.1%
HVO 5	*iso*-alkane	17.2%	17.1%	17.5%	17.3%	0.2%
	monocyclo-alkane	0.6%	0.7%	0.7%	0.7%	0.1%
	n-alkane	82.1%	82.2%	81.8%	82.0%	0.2%
HVO 6	*bi*- and *tricyclo*-alkane	0.8%	0.9%	0.9%	0.8%	0.1%
	diaromatic	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%
	FAME	0.4%	0.4%	0.4%	0.4%	<0.1%
	iso-alkane	76.8%	76.3%	76.5%	76.6%	0.3%
	mono-aromatic	0.7%	0.8%	0.9%	0.8%	0.1%
	monocyclo-alkane	3.5%	3.5%	3.2%	3.4%	0.2%
	n-alkane	17.8%	18.1%	18.1%	18.0%	0.2%
HVO 7	*bi*- and *tricyclo*-alkane	0.1%	<0.1%	0.1%	<0.1%	<0.1%
	FAME	0.1%	0.1%	0.1%	0.1%	<0.1%
	iso-alkane	76.6%	77.0%	76.9%	76.9%	0.2%
	mono-aromatic	0.2%	0.2%	0.2%	0.2%	<0.1%
	monocyclo-alkane	0.9%	0.7%	0.8%	0.8%	0.1%
	n-alkane	22.1%	21.9%	22.0%	22.0%	0.1%

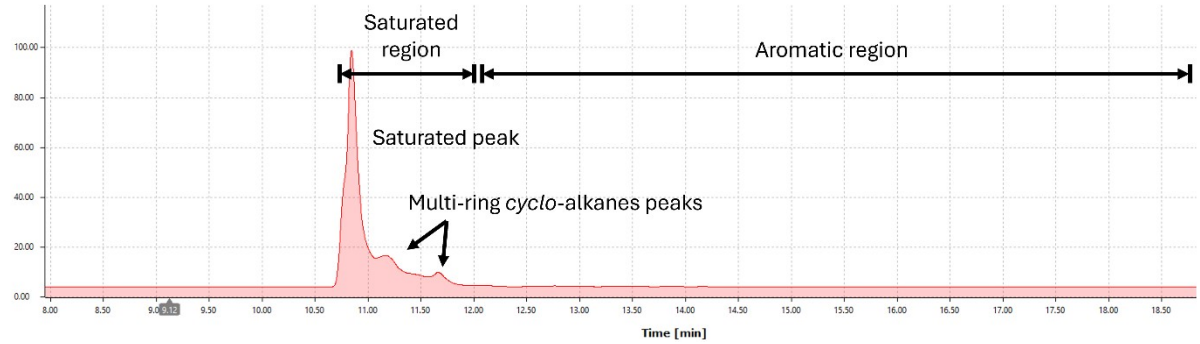

Figure S1: SFC-FID analysis of HVO 4, showing saturates and aromatics elution windows.

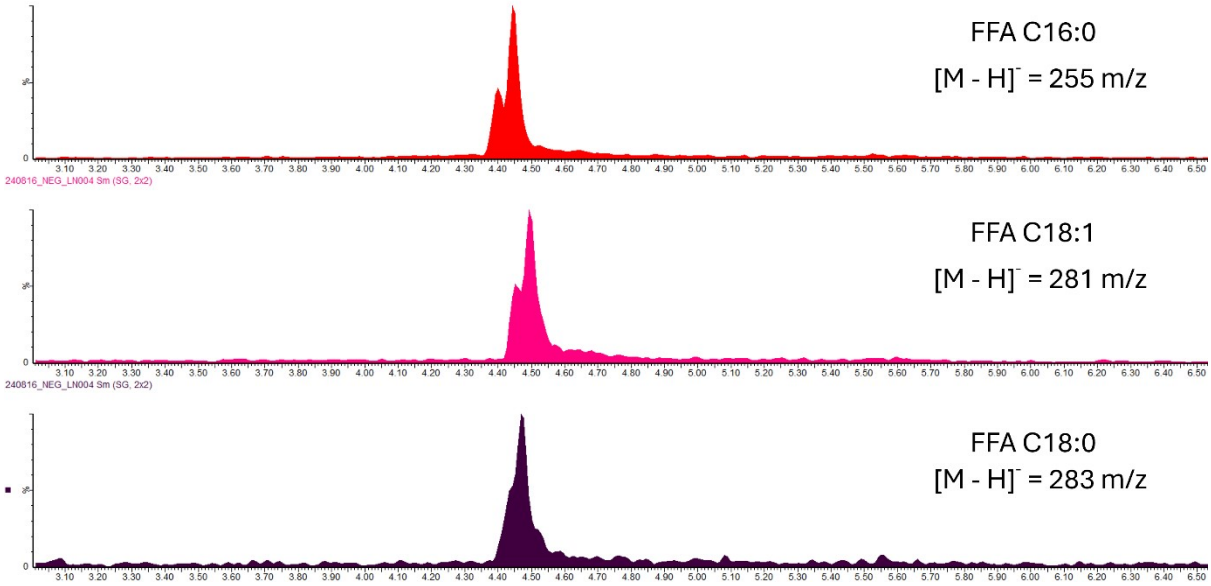

Figure S2: Reconstructed ion current chromatogram (RICC) of the negative ion ESI SFC-MS for HVO 5.