SUPPLEMENTARY DATA
Gottmann, J., Müller, D., Becker A. M., Vestner, J., Schuster, J. & Fischer, U. (2022). Improved Sealing Polymers and Cleaning Procedures to Mitigate Aroma Carryover during bottling of aromatized and regular wines on the same filling line. *OENO One, 56*(4).
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Supplemental Material

SUPPLEMENTAL TABLE 1. Density of polymer materials with different fillings investigated in the model system.

	filling material [phr]	KEP 510 [phr]	white oil [phr]	Peroxan DC [phr]	TAC-70 XP [phr]	weight [g/plate]	density [g/cm^3]
reference material							
70 EPDM 291	-	-	-	-	-	2.77	1.2
FKM 75 Fluoroprene (XP41)	-	-	-	-	-	4.88	2.0
manufactured EPDM variants							
aktifit VM	50	100	10	8	2	2.97	1.2
	150	100	10	8	2	3.61	1.5
kaolin	50	100	10	8	2	3.23	1.4
	150	100	10	8	2	3.60	1.5
talcum	50	100	10	8	2	2.77	1.2
	150	100	10	8	2	3.40	1.4
micro-cellulose	50	100	10	8	2	3.03	1.3
	150	100	10	8	2	3.05	1.3
glass flakes	50	100	10	8	2	3.00	1.3
	150	100	10	8	2	3.62	1.5
cork	50	100	10	8	2	2.77	1.2
	100	100	10	8	2	2.30	1.0
polyethylen-wax	25	100	10	8	2	2.30	1.0
	50	100	10	8	2	2.11	0.9
Carbon Black N220	50	100	10	8	2	3.20	1.3
	100	100	10	8	2	3.44	1.4
Carbon Black N990	50	100	10	8	2	2.79	1.2
	150	100	10	8	2	3.55	1.5

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SUPPLEMENTAL TABLE 2. Aroma compounds absorbed into experimental EPDM and FKM (XP41) after 48 h immersion of polymer plates in aromatized model wine (n = 4).

	ethyl 2-methylbutanoate		α-ionone		*trans*-cinnamaladehyde		eugenol		γ-decalactone		δ-decalactone		γ-undecalactone	
	%	*µg/cm³*	*%*	*µg/cm³*	*%*	*µg/cm³*	*%*	*µg/cm³*	*%*	*µg/cm³*	*%*	*µg/cm³*	*%*	*µg/cm³*
reference material														
EPDM	100 %	(3.5 ± 1.6)	100 %	(22.6 ± 6.1)	100 %	(1.8 ± 0.4)	100 %	(4.1 ± 0.9)	100 %	(6.5 ± 1.2)	100 %	(3.9 ± 0.3)	100 %	(12.5 ± 2.2)
FKM (XP41)	**6 %**	(0.2 ± 0.0)	**2 %**	(0.5 ± 0.1)	**5 %**	(0.1 ± 0.0)	**1 %**	(0.0 ± 0.0)	**16 %**	(1.0 ± 0.2)	**nd**		**11 %**	(1.4 ± 0.3)
aktifit VM														
50 phr	70 %	(2.4 ± 0.8)	77 %	(17.4 ± 1.7)	**50 %**	(0.9 ± 0.1)	**19 %**	(0.8 ± 0.4)	94 %	(6.1 ± 1.0)	**52 %**	(2.1 ± 0.3)	100 %	(12.5 ± 2.2)
150 phr	**40 %**	(1.4 ± 0.6)	61 %	(13.8 ± 1.7)	**43 %**	(0.8 ± 0.1)	**14 %**	(0.6 ± 0.3)	83 %	(5.4 ± 0.8)	**57 %**	(2.2 ± 0.3)	89 %	(11.1 ± 1.8)
kaolin														
50 phr	**53 %**	(1.8 ± 0.1)	79 %	(17.8 ± 1.3)	**40 %**	(0.7 ± 0.1)	**20 %**	(0.8 ± 0.3)	123 %	(8.0 ± 0.6)	65 %	(2.6 ± 0.6)	116 %	(14.5 ± 1.3)
150 phr	**43 %**	(1.5 ± 0.3)	**49 %**	(11.1 ± 1.2)	**44 %**	(0.8 ± 0.2)	**nd**		78 %	(5.0 ± 1.2)	**16 %**	(0.6 ± 0.0)	**50 %**	(6.2 ± 0.4)
talcum														
50 phr	**48 %**	(1.6 ± 0.1)	84 %	(18.9 ± 1.0)	**57 %**	(1.0 ± 0.2)	**20 %**	(0.8 ± 0.4)	124 %	(8.0 ± 0.3)	**51 %**	(2.0 ± 0.3)	113 %	(14.1 ± 1.2)
150 phr	**34 %**	(1.2 ± 0.2)	78 %	(17.6 ± 3.6)	**45 %**	(0.8 ± 0.3)	**19 %**	(0.8 ± 0.3)	119 %	(7.7 ± 1.8)	**51 %**	(2.0 ± 0.4)	97 %	(12.1 ± 2.2)
micro-cellulose														
50 phr	77 %	(2.6 ± 0.6)	**42 %**	(9.5 ± 0.7)	**31 %**	(0.6 ± 0.1)	**32 %**	(1.3 ± 0.2)	**48 %**	(3.1 ± 0.5)	**24 %**	(0.9 ± 0.5)	**49 %**	(6.1 ± 1.3)
150 phr	**28 %**	(1.0 ± 0.0)	**40 %**	(9.1 ± 2.7)	**6 %**	(0.1 ± 0.1)	**18 %**	(0.7 ± 0.2)	**52 %**	(3.4 ± 0.8)	**26 %**	(1.0 ± 0.5)	**53 %**	(6.6 ± 1.2)
glass flakes														
50 phr	**56 %**	(1.9 ± 0.0)	104 %	(23.6 ± 1.0)	73 %	(1.3 ± 0.3)	61 %	(2.5 ± 0.8)	151 %	(9.8 ± 1.6)	106 %	(4.2 ± 0.7)	142 %	(17.7 ± 2.4)
150 phr	**31 %**	(1.1 ± 0.1)	60 %	(13.6 ± 0.8)	**30 %**	(0.5 ± 0.2)	**21 %**	(0.9 ± 0.3)	76 %	(4.9 ± 1.1)	**36 %**	(1.4 ± 0.4)	73 %	(9.1 ± 1.3)
cork														
50 phr	**46 %**	(1.6 ± 0.1)	**44 %**	(10.1 ± 2.8)	97 %	(1.7 ± 0.4)	145 %	(5.9 ± 1.1)	97 %	(6.3 ± 1.3)	**55 %**	(2.2 ± 0.4)	87 %	(10.9 ± 2.3)
100 phr	**39 %**	(1.3 ± 0.8)	63 %	(14.3 ± 2.3)	141 %	(2.5 ± 0.5)	182 %	(7.4 ± 1.2)	120 %	(7.8 ± 1.1)	76 %	(3.0 ± 0.8)	108 %	(13.5 ± 2)
PE-wax														
25 phr	**15 %**	(0.5 ± 0.0)	**45 %**	(10.1 ± 0.9)	**9 %**	(0.2 ± 0.1)	**6 %**	(0.2 ± 0.1)	84 %	(5.4 ± 1.3)	64 %	(2.5 ± 0.3)	74 %	(9.2 ± 1.2)
50 phr	61 %	(2.1 ± 0.0)	**50 %**	(11.3 ± 6.2)	**50 %**	(0.9 ± 0.3)	**39 %**	(1.6 ± 1.5)	94 %	(6.1 ± 2.1)	**48 %**	(1.9 ± 1.3)	82 %	(10.2 ± 4.4)
Carbon Black N220														
50 phr	**33 %**	(1.1 ± 0.0)	80 %	(18.1 ± 1.6)	144 %	(2.6 ± 0.2)	98 %	(4.0 ± 0.4)	136 %	(8.8 ± 1.1)	77 %	(3.0 ± 0.5)	123 %	(15.3 ± 2.0)
100 phr	**52 %**	(1.8 ± 0.1)	69 %	(15.7 ± 0.6)	206 %	(3.7 ± 0.9)	129 %	(5.2 ± 0.9)	142 %	(9.2 ± 0.8)	83 %	(3.3 ± 0.2)	119 %	(14.9 ± 1.1)
Carbon Black N990														
50 phr	**52 %**	(1.8 ± 0.1)	88 %	(19.9 ± 3.7)	81 %	(1.5 ± 0.3)	63 %	(2.5 ± 0.9)	132 %	(8.5 ± 1.4)	**58 %**	(2.3 ± 0.3)	118 %	(14.7 ± 1.9)
150 phr	62 %	(2.1 ± 0.3)	75 %	(17.0 ± 1.9)	69 %	(1.2 ± 0.2)	43 %	(1.8 ± 0.4)	114 %	(7.4 ± 0.7)	**58 %**	(2.3 ± 0.3)	104 %	(12.9 ± 1.9)