

附表 1 关键香气成分 OAV 值及气味描述

Supplementary table 1 OAV values and odor descriptions of key aroma components

关键香气成分 Key aroma components	阈值 Odor threshold (μg·kg ⁻¹)	香气活力值 OAV 值													气味描述 Odor description
		0d		30d			60d					90d			
					3% O ₂	3% O ₂			3% O ₂	3% O ₂			3% O ₂	3% O ₂	
		CK	CK	1-MCP	+	+	CK	1-MCP	+	+	CK	1-MCP	+	+	
					1% CO ₂	5% CO ₂			1% CO ₂	5% CO ₂			1% CO ₂	5% CO ₂	
乙酸戊酯 Acetic acid, pentyl ester	50.00	18.36	10.92	-	-	7.15	-	-	-	6.86	-	-	-	7.54	香蕉、梨样果香，略带甜味 Banana- and pear-like fruity note, slightly sweet.
正己酸乙酯 Ethyl caproate	12.00	27.10	83.01	-	90.44	617.93	51.32	21.57	39.24	362.08	56.45	23.73	43.16	398.29	菠萝果香，兼有香蕉和葡萄酒的醇香 Pineapple fruitiness, accompanied by banana and the rich aroma of wine.
醋酸辛酯 Acetic acid, octyl ester	300.00	2.69	-	-	-	-	-	-	-	-	-	-	-	-	橙子、茉莉样果香和花香，带油脂底蕴 Orange- and jasmine-like fruity and floral aroma, with an oily undertone.
乙酸庚酯 Acetic acid, heptyl ester	90.00	2.16	-	-	-	-	-	-	-	-	-	-	-	-	梨、桃样果香，带油脂感和玫瑰底韵 Pear- and peach-like fruity note, with a greasy feel and

名称	CAS	1	2	3	4	5	6	7	8	9	10	11	12	13	描述
辛酸乙酯															a rosy base note.
Octanoic acid, ethyl ester	650.00	-	1.17	-	1.53	7.20	-	-	-	3.28	-	-	-	3.61	甜润的果香-皂香，类似菠萝、杏干，带蜡感
2-甲基丁酸乙酯															Sweet, fruity-soapy aroma, reminiscent of pineapple and dried apricots, with a waxy sensation.
Butanoic acid, 2-methyl-, ethyl ester	0.15	-	-	-	-	-	-	-	-	4674.40	-	-	-	5141.80	多汁的苹果、香蕉混合果香，略带酒香
里那醇															
Linalool	10.00	69.14	35.12	23.28	-	18.23	-	-	-	-	-	-	-	-	Juicy apple and banana blended fruity aroma, with a slight vinous note.
															清新花香，类似铃兰、薰衣草，带木香底蕴
正辛醇															
1-Octanol	100.00	11.99	12.72	13.08	6.23	7.94	17.81	5.05	8.14	8.66	19.59	5.56	8.95	9.53	Fresh floral scent, similar to lily-of-the-valley and lavender, with a woody undertone.
															甜润的橙子-玫瑰样香气，带蜡感和油脂感
异戊醇															
1-Butanol, 3-methyl-	300.00	-	2.11	-	-	-	-	-	-	-	-	-	-	-	Sweet, orange- and rose-like aroma, with waxy and oily nuances.
															刺鼻的药草、焦香，高度稀释后有酒香、香蕉香
															Pungent herbal and burnt

															aroma, which develops wine-like and banana notes upon high dilution.
反式-2-戊烯醛 2-Pentenal, (E)-	150.00	13.82	9.44	10.73	12.26	13.48	12.26	11.16	13.59	12.58	13.48	12.28	14.95	13.84	尖锐的青草、苹果皮香气 Sharp, green grassy and apple peel scent.
正辛醛 octanal	0.70	4668.83	1660.46	1601.59	475.86	705.60	-	-	-	361.93	-	-	-	398.11	甜橙、柠檬皮 Sweet orange and lemon peel.
(E,E)-2,4-庚二烯醛 2,4-Heptadienal, (E,E)-	30.00	-	12.48	10.66	-	-	34.05	15.21	22.40	32.29	37.45	-	21.36	29.40	油脂、油炸香气 Oily and fried food aroma.
异戊醛 Isovaleraldehyde	8.00	-	-	-	-	-	37.56	-	35.81	-	41.32	-	39.39	-	巧克力、麦芽香，带果香和发酵感 Chocolate and malt aroma, with fruity and fermented nuances.
3-辛酮 3-Octanone	1000.00	2.29	1.92	1.89	1.36	1.50	-	-	-	1.81	-	-	-	1.99	强烈的霉腐、泥土香气，类似蘑菇、奶酪 Intense musty, earthy odor, similar to mushrooms and cheese.
6-甲基-5-庚烯-2-酮	100.00	11.93	5.30	4.76	-	-	5.55	3.02	3.50	3.95	6.10	3.32	3.85	4.35	清新青香-果香，类似梨、香蕉，带油脂底蕴

Chemical Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Notes
6-Methyl-5-hepten-2-one																Fresh green-fruity aroma, reminiscent of pear and banana, with an oily undertone.
beta-紫罗酮																浓郁的紫罗兰、覆盆子香气，兼有木香
trans-beta-Ionone	474.00	-	1.53	1.48	1.07	1.00	-	-	-	-	4.40	-	-	-		Rich violet and raspberry scent, combined with woodiness.
异佛尔酮																清凉的樟脑、薄荷样香气，带木香和甜味
Isophorone	100.00	-	-	10.02	-	-	-	-	-	-	-	-	-	-		Cool, camphorous and minty aroma, with woody and sweet notes.
(+)-柠檬烯																清新、愉快的甜橙皮香气
(+)-Limonene	210.00	3.98	-	-	3.62	-	8.10	6.13	6.65	6.84	8.91	6.75	7.32	7.53		Fresh and pleasant sweet orange peel aroma.
苯乙烯																甜香、花香
phenylethylen	120.00	-	-	-	-	-	-	-	-	5.24	-	-	-	5.77		Sweet, floral scent.

