

Sensory Evaluation Notes

#	Flavor Name	Flavor Descriptor	Common Sources	Related Terms	Concentration	Notes
Process-Related						
6	D.M.S.	Cooked corn/cooked vegetable	Wort boil, wort cooling, or contamination	Sweetcorn, creamed corn, cooked vegetable, tomato sauce	360 ug/L	
12	Metallic	Metal/tin-like	Water sources, non-passivated vessels	Inky, blood-like, tinny	3.75 mg/L	
16	Grainy	Husk-like/nut-like	Excessive run-off OR insufficient wort boil	green malt, green, harsh	3.75 mg/L	
Hops						
13	Geraniol	Floral/rose-like	Hop addition and variety	rose-like, floral, flowery	450 ug/L	
17	Isovaleric	Cheesy/old hops/sweaty socks	Old, degraded hops	putrid, stale cheese, sweaty, old hops	3 mg/L	
22	Bitter	Hoppy/bitter	Hopping/hop addition	quinine, bitter hops	24 mg/L	
Aging / Storage						
20	Papery	Cardboard/oxidized	Product of oxidation/staling	cardboard, oxidized	2 ug/L	
BONUS	Lighstruck	Skunky	Lightstruck - esp green or clear bottles	skunky, skunked, sunstruck		
Fermentation						
1	Acetaldehyde	Green apple/green beer	Ferm. product, staling, or contamination	aldehydic, bruised apples, emulsion paint	45 mg/L	
3	Almond	Marzipan	Specific styles, yeast growth, or raw materials	marzipan, bitter almonds	3 mg/L	
5	Diacetyl	Butter/butterscotch	Microbial contamination OR improper maturation	buttery, butterscotch, milky drains, rotten	0.9 mg/L	
8	Mercaptan	Sewer-like	Poor yeast health, autolysis	vegetables, leeks	3.75 ug/L	
9	Ethyl acetate	Solvent-like esters	Wort composition and yeast growth	nail polish, acetone, estery	90 mg/L	
10	Ethyl hexanoate	Apple-like esters	Ferm. product, wort composition, or yeast health	estery, apple, aniseed	0.6 mg/L	
15	Isoamyl acetate	Banana esters/peardrop	Ferm. product, wort composition, or yeast health	estery, fruity, banana, peardrop	4.5 mg/L	
21	Vanilla	Custard powder	Specific styles, phenol flavor compound, or wild yeast	custard, cream soda, ice cream	150 ug/L	
24	Hefeweizen	Spicy + banana esters	Specific beer styles	banana + clove	80 ug/L + 3 mg/L	

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Contamination / Infection						
2	Acetic	Vinegar-like	Contamination (mash, bacteria, or wild yeast)	vinegar, acidic	270 mg/L	
18	Lactic	Sour/sour milk	Beer spoilage bacteria	sour milk, yogurt	400 mg/L	
4	Butyric	Rancid butter/putrid	Bacterial contamination	rancid, baby sick, putrid	7.5 mg/L	
7	Earthy	Geosmin/soil-like	Packaging contamination OR water derived contam.	damp soil, freshly dug soil, beets	15 ug/L	
11	Spicy	Cloves	Microbial contamination, wild yeast, or aging	clove oil, allspice, eugenol	120 ug/L	
14	Indole	Farm/barnyard	Bacterial infection during fermentation	barnyard, fecal, coliform, jasmine	0.55 mg/L	
19	Caprylic	Soapy/fatty/goaty	Microbial contam. OR yeast breakdown at maturation	goaty, waxy, tallowy	31.5 mg/L	
23	Infection	Sour + buttery	Microbial infection/contamination	sour + buttery, pediococcus	0.02 mg/L + 180 mg/L	