

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

AP42 Section:	9.12.1
Background Chapter	4
Reference:	16
Title:	Filler Rooms Diagnostic VOC Test Report for Coors Brewing Company, Air Pollution Testing, Inc., Westminster, CO, December, 1992.

D. Emission Data/Mass Flux Rates/Emission Factors

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
1	Stack temperature	Deg F	72	69	68	
#3 BOTTLE FILLER EXHAUST VENT	Moisture	%	1.32	0.92	0.48	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	1861	1837	1866	
	Volumetric flow, OUTLET	dscfm	1499	1494	1528	1507
	Volumetric flow, INLET 1	dscfm	1874	2359	1923	
	Volumetric flow, INLET 2	dscfm	1871	1825	1879	
	Volumetric flow, INLET 3	dscfm	1829	2333	2646	
	Isokinetic variation	%	NA	NA	NA	
Circle: Production or feed rate Capacity:		1000 bbl/hr	0.0853	0.0853	0.0853	
Pollutant concentrations:						
	THC as propane--OUTLET	ppmwv	28.6	30.3	30.6	
	THC as propane--INLET 1	ppmwv	2	3.5	3	
	THC as propane--INLET 2	ppmwv	2.5	1	1.5	
	THC as propane--INLET 3	ppmwv	3	3	3	
Pollutant mass flux rates: THEORETICAL--USE TOTAL I FLOW RATE AND I-O CONC.						
	THC as propane	lb/hr	1.01	1.25	1.25	
	THC as ethanol (CF = 2.506)	lb/hr	2.54	3.13	3.13	
Emission factors:						Average
	THC as propane	lb/1000 bbl	11.9	14.7	14.6	13.7
	THC as ethanol	lb/1000 bbl	29.7	36.7	36.6	34.4

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
2	Stack temperature	Deg F	68	68	68	
#5 CAN FILLER EXHAUST VENT	Moisture	%	0.9	0.92	1.02	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	3894	3879	3750	
	Volumetric flow, OUTLET	dscfm	3130	3116	3009	3085
	Volumetric flow, INLET 1	dscfm	2108	2129	2090	
	Volumetric flow, INLET 2	dscfm	2615	3059	2526	
		Isokinetic variation	%	NA	NA	NA
Circle: Production or feed rate Capacity:		1000 bbl/hr	0.2077	0.2077	0.2077	
Pollutant concentrations:						
	THC as propane--OUTLET	ppmwv	93.4	87.2	85.5	
	THC as propane--INLET 1	ppmwv	1	1	1.3	
	THC as propane--INLET 2	ppmwv	1	1	1.3	
Pollutant mass flux rates: THEORETICAL--USE TOTAL I FLOW RATE AND I-O CONC.						
	THC as propane	lb/hr	3.02	3.10	2.70	
	THC as ethanol (CF = 2.506)	lb/hr	7.58	7.77	6.76	
Emission factors:						Average
	THC as propane	lb/1000 bbl	14.6	14.9	13.0	14.2
	THC as ethanol	lb/1000 bbl	36.5	37.4	32.5	35.5

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
3	Stack temperature	Deg F	68	68	72	
#6 CAN FILLER EXHAUST VENT	Moisture	%	1.52	0.82	1.11	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	2374	2366	2283	
	Volumetric flow, OUTLET	dscfm	1927	1930	1847	1901.3333
	Volumetric flow, INLET 1	dscfm	3766	1660	1030	
	Volumetric flow, INLET 2	dscfm	1803	1643	2335	
	Isokinetic variation	%	NA	NA	NA	
Circle: Production or feed rate Capacity:		1000 bbl/hr	0.2167	0.2167	0.2167	
Pollutant concentrations:						
	THC as propane--OUTLET	ppmwv	113.5	111.1	111.5	
	THC as propane--INLET 1	ppmwv	1.5	1.5	2.5	
	THC as propane--INLET 2	ppmwv	1	1	1	
Pollutant mass flux rates: THEORETICAL--USE TOTAL I FLOW RATE AND I-O CONC.						
	THC as propane	lb/hr	4.36	2.51	2.57	
	THC as ethanol (CF = 2.506)	lb/hr	10.91	6.30	6.44	
Emission factors: Average						
	THC as propane	lb/1000 bbl	20.1	11.6	11.9	14.5
	THC as ethanol	lb/1000 bbl	50.4	29.0	29.7	36.4

Test ID	Parameter	Units	Values reported			
			Average for 33 hours			
4	Stack temperature	Deg F				
#9 CAN FILLER EXHAUST VENT	Moisture	%	0.6			
	Oxygen	%	20.9			
	Volumetric flow, actual	acfm				
	Volumetric flow, OUTLET	dscfm	2359			
	Volumetric flow, INLET 1	dscfm	6392			
	Volumetric flow, INLET 2	dscfm	2379			
	Isokinetic variation	%	NA			
Circle: Production or feed rate Capacity:		1000 bbl/hr	0.1538			
Pollutant concentrations:						
	THC as propane--OUTLET	ppmwv	42.1			
	THC as propane--INLET 1	ppmwv	2.5			
	THC as propane--INLET 2	ppmwv	2.7			
Pollutant mass flux rates: THEORETICAL--USE TOTAL I FLOW RATE AND I-O CONC.						
	THC as propane	lb/hr	2.40			
	THC as ethanol (CF = 2.506)	lb/hr	6.00			
Emission factors:						
	THC as propane	lb/1000 bbl	15.6			
	THC as ethanol	lb/1000 bbl	39.0			