

E09 - ENGINE, BUTANE FIRED, UNCONTROLLED

CALCULATION METHODS

$E_a = U_a \times EF$ (lbs/1000 gallons)

$E_h = U_h$ (gal/hr) \times (1/1000) \times EF (lbs/1000 gallons)

NOTES:

- Control efficiencies must be included in emission factors since the calculation procedure will not refer to this data.

- There are no current emission factors specified in AP-42 for butane fired engines. Previous factors were identified in the ARB Instructions for the Emission Data System (8/91), Appendix III, Page III-7.

- Trace metal emission factors are assumed to be negligible for butane fuel.

- Trace organic compounds are assumed 100% butane. ARB VOC Speciation Profile 719 (8/91) is for natural gas not butane.

POLLUTANT	District Emission Factor	REFERENCE	ARB	(UNITS)	COMMENTS
	(lbs/1000 gal fuel burned)	DOCUMENT	FACTOR		
NOX	139.00	See Comments	139	(lbs/1000 gal)	ARB "Instructions for the Emission Data System Review & Update Report 8/91".
CO	129.00		129		
SOX	0.35		0.35		
TOG	83.00		83		Assume all TOG and ROG is butane (i.e.; negligible methane, formaldehyde, etc.)
ROG	83.00		83		
TSP	5.00		5		
PM10	5.00		5		
BENZENE					
1,3-BUTADIENE					
BUTANE	83.00	Not a listed substance			Assume all ROG and TOG is butane.
CHLORINE					
ETHYL BENZENE					
FORMALDEHYDE					
HEXANE					
HYDROGEN CHLORIDE					
HYDROGEN SULFIDE					
TOLUENE					
XYLENES					