

Appendix 2: Response Factors

Chemical Name	RF
1,2,3-trimethylbenzene	0.49
1,2,4-trimethylbenzene	0.43
1,2-dibromoethane	11.70
1,2-dichlorobenzene	0.50
1,2-dichloroethane (11.7 lamp)	0.50
1,3,5-trimethylbenzene	0.34
1,4-dioxane	1.40
1-butanol	3.40
1-methoxy-2-propanol	1.40
1-propanol	5.70
2-butoxyethanol	1.30
2-methoxyethanol	2.50
2-pentanone	0.78
2-picoline	0.57
3-picoline	0.90
4-hydroxy-4-methyl-2-pentanone	0.55
acetaldehyde	10.80
acetic acid	11.00
acetone	1.20
acetophenone	0.59
acrolein	3.90
allyl alcohol	2.50
ammonia	9.40
amylacetate	3.50
arsine	2.60
benzene	0.53
bromoform	2.30
bromomethane	1.80
butadiene	0.69
butyl acetate	2.40
carbon disulfide	1.20
chlorobenzene	0.40
cumene (isopropylbenzene)	0.54
cyclohexane	1.50
cyclohexanone	0.82
decane	1.60
diethylamine	1.00
dimethoxymethane	11.30
dimethyl disulfide	0.30
diesel fuel #1	0.90
diesel fuel #2	0.75
epichlorhydrin	7.60

ethanol	10.00
ethyl acetate	4.20
ethyl acetoacetate	0.90
ethyl acrylate	2.30
ethyl ether (diethyl ether)	1.20
ethyl mercaptan	0.60
ethylbenzene	0.51
ethylene	10.10
ethylene glycol	15.70
ethylene oxide	19.50
gasoline	1.10
heptane	2.50
hydrazine	2.60
hydrogen sulfide	3.20
isoamyl acetate	1.80
isobutanol	4.70
isobutyl acetate	2.60
isobutylene	1.00
isooctane	1.30
isopentane	8.00
isophorone	0.74
isoprene (2-methyl-1,3-butadiene)	0.60
isopropanol	5.60
isopropyl acetate	2.60
isopropyl ether	0.80
isopropylamine	0.90
Jet A fuel	0.40
JP-5 fuel	0.48
JP-8 fuel	0.48
mesityl oxide	0.47
methanol (11.7 lamp)	2.50
methyl acetate	7.00
methyl acetoacetate	1.10
methyl acrylate	3.40
methyl benzoate	0.93
methyl ethyl ketone	0.90
methyl isobutyl ketone	1.10
methyl mercaptan	0.60
methyl methacrylate	1.50
methyl tert-butyl ether	0.86
methylamine	1.20
methylbenzil alcohol	0.80
methylene chloride (11.7 lamp)	0.85
m-xylene	0.53
naphtalene	0.37

n,n-dimethylacetamide	0.73
n,n-dimethylformamide	0.80
n-hexane	4.50
nitric oxide	7.20
n-nonane	1.60
nitrogen dioxide (11.7 lamp)	10.00
n-pentane	9.70
n-propyl acetate	3.10
octane	2.20
o-xylene	0.54
phenol	1.00
phosphine	2.80
pinene, alpha	0.40
pinene, beta	0.40
propionaldehyde (propanal)	14.80
propylene	1.30
propylene oxide	6.50
p-xylene	0.50
pyridine	0.79
quinoline	0.72
styrene	0.40
tert-butyl alcohol	3.40
tert-butyl mercaptan	0.55
tert-butylamine	0.71
tetrachloroethylene	0.56
tetrahydrofuran	1.60
thiophene	0.47
toluene	0.53
trans-1,2-Dichloroethene	0.45
trichloroethylene	0.50
trimethylamine	0.83
turpentine - crude sulfite	1.00
turpentine - pure gum	0.45
vinyl acetate	1.30
vinyl bromide	0.40
vinyl chloride	1.80
vinylcyclohexane (VCH)	0.54
vinylidene chloride (1,1-DCE)	0.80

Note: Data extracted from industry literature; actual data has not been independently validated by GDS Corp. Response factor values are **approximate** and are only given as a general guide to the response which may be expected from other gases. For accurate readings, it is always better to calibrate the unit with the actual target gas whenever possible.