

# ACM 100 / ACM150 Gas List

Chemical Name	Formula	Synonym	CAS Num.	ACM100 LDL-UDL (ppm)	ACM150 LDL (ppm)	Note
Acetaldehyde	C <sub>2</sub> H <sub>4</sub> O	Ethyl aldehyde	75-07-0	11	7	
Acetic acid	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	Ethanoic acid, Hydrogen acetate (Hac), vinegar	64-19-7	2-500	1.3	
Acetic Anhydride	(CH <sub>3</sub> CO) <sub>2</sub> O	Acetyl oxide, Acetyl acetate	108-24-7	1	0.7	
Acetone	(CH <sub>3</sub> ) <sub>2</sub> CO	Dimethyl ketone	67-64-1	4-800	2.7	
Acetonitrile	C <sub>2</sub> H <sub>3</sub> N	Methyl cyanide	75-05-8	170	115	
Acetyl Acetone	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	Hacac, Pentane-2.4-dione	123-54-6	4	2.7	
Acetylene	C <sub>2</sub> H <sub>2</sub>	Ethine	74-86-2	2-200	1.3	as THC
Acrolein	C <sub>3</sub> H <sub>4</sub> O	Aqualine, Alylaldehyde, Propenal	107-02-8	8	5.3	
Acrylonitrile	CH <sub>2</sub> =CHCN C <sub>3</sub> H <sub>3</sub> N	2-Propenenitrile	107-13-1	8-1000	5.3	
Ammonia	NH <sub>3</sub>	Ammonia	7664-41-7	1.5-200	1	
Arsine	AsH <sub>3</sub>	Hydrogen arsenide	7784-42-1	1-300	0.7	
Benzene	C <sub>6</sub> H <sub>6</sub>	Benzol, Pyrobenzol	71-43-2	2-300	1	
Benzyl alcohol	C <sub>7</sub> H <sub>8</sub> O	Phenyl methanol, BnOH	100-51-6	6-500	4	
Bis(tertiary-butyl-amino)silane	SiH <sub>2</sub> [NH(C <sub>4</sub> H <sub>9</sub> )] <sub>2</sub>	BTBAS	186598-40-3	decompose on contact with moist		
Boron trichloride	BCl <sub>3</sub>	Borontrichloride	10294-34-5	1-100	0.7	RH depndent
Boron trifluoride	BF <sub>3</sub>	Borontrifluoride; Trifluoroborane	7637-07-02	1.5 -200	1	RH depndent
Bromomethane	CH <sub>3</sub> Br	Methyl bromide, R-40B1	74-83-9	40	25	
Butadiene, 1,3-	C <sub>4</sub> H <sub>6</sub>	Vinyl ethylene	106-99-0	2-300	1.3	
Butane	C <sub>4</sub> H <sub>10</sub>	Butyl hydride; Methylethylmethane	106-97-8	1.5-300	1	
Butene, 1-	C <sub>4</sub> H <sub>8</sub>	Ethylethylene, 1-Butylene	106-98-9	5	3	
Butyl acetate	CH <sub>3</sub> COO[CH <sub>2</sub> ] <sub>3</sub> CH <sub>3</sub>	n-Butyl acetate	123-86-4	1.5-200	1	
Butyl alcohol, 1-	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>2</sub> OH	n-Butyl alcohol, Butanol	71-36-3	5	3	
Butyl cellosolve acetate	C <sub>8</sub> -H <sub>16</sub> -O <sub>3</sub>	Ethylene glycol butyl ether acetate, 2-butoxyethanol acetate	112-07-2	1.2	0.8	
Butyrolactone	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>	4-Butyrolactone	96-48-0	0.8-300	0.5	
Carbon dioxide	CO <sub>2</sub>	Carbon dioxide	124-38-9	1.5-500	1	
Carbon disulfide	CS <sub>2</sub>	Carbon bisulfide	75-15-0	7-1000	4.5	
Carbon monoxide	CO	Carbon monoxide	630-08-0	5 - 50	3.5	
Carbon tetrachloride	CCl <sub>4</sub>	Carbontetrachloride	56-23-5	0.2-100	0.1	
Carbonyl fluoride	COF <sub>2</sub>	Fluorophosgene; Carbon difluoride oxide	353-50-4	3	2	
Carbonyl Sulphide	COS	Carbon oxide sulfide, Carbon oxysulfide	463-58-1	0.5-25/50	0.3	
Chlorobenzene	C <sub>6</sub> H <sub>5</sub> Cl	Phenyl chloride	108-90-7	3	2	
Chlorodifluoromethane	CHClF <sub>2</sub>	R-22, HCFC-22	75-45-6	0.5-100	0.3	
Chloroform	CHCl <sub>3</sub>	Trichloromethane, R-20, Freon 20, TCM	67-66-3	0.5-200	0.3	
Chloromethane	CH <sub>3</sub> Cl	Methyl chloride, R-40, HCC-40	74-87-3	14	9	
Chloropivaloylchloride, 3-	ClCH <sub>2</sub> C(CH <sub>3</sub> ) <sub>2</sub> COCl	3-Chloro-2,2-dimethylpropionyl chloride	4300-97-4	2	1.3	
Chlorotrifluoroethylene	C <sub>2</sub> ClF <sub>3</sub>	1-Chloro-1,2,2-trifluoroethene, R-1113, Genetron 1113	79-38-9	1	0.7	
CVD-3000 (Silicon Cabide Precursor)			n/a	0.4	0.3	
Cyanogen	C <sub>2</sub> N <sub>2</sub>	(CN) <sub>2</sub>	460-19-5	25-2000	17	
Cyclohexane	C <sub>6</sub> H <sub>12</sub>	Hexamethylene	110-82-7	0.5-200	0.3	as THC
Cyclohexanol	C <sub>6</sub> H <sub>12</sub> O	Hydralin	108-93-0	5	3	
Cyclohexanone	C <sub>6</sub> H <sub>10</sub> O, (CH <sub>2</sub> ) <sub>5</sub> CO	Cyclohexanone	108-94-1	10	7	
Cyclohexene	C <sub>6</sub> H <sub>10</sub>	Hexahydrobenzene; Hexanaphthene	110-83-8	4-500	2.7	
Cyclopentanone	C <sub>5</sub> H <sub>8</sub> O	Ketocyclopentane	120-92-3	2.5	1.7	
Desflurane	C <sub>3</sub> H <sub>2</sub> F <sub>6</sub> O	Suprane	57041-67-5	1-50	0.7	
Diborane	B <sub>2</sub> H <sub>6</sub>	Boroethane	19287-45-7	1-200	0.7	
Dichlorobenzene, 1,2-	C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	o-Dichlorobenzene (ODCB)	95-50-1	6	4	
Dichloroethane	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	Ethylene dichloride	156-60-2	2-1000	1.3	
Dichloroethylene, t-1,2-	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	Dichloroethylene, Trans-LC	150-60-5	1-1000	0.6	
Dichloroethylene, trans, 1,2-	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	t-1,2-Dichloroethylene, trans LC, 1,2-DCE	156-60-5	1-1000	0.6	
Dichlorofluoromethane (FC-21)	CHCl <sub>2</sub> F	R-21	75-43-4	1.5	1	

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Dichloromethane	CH <sub>2</sub> Cl <sub>2</sub>	HCC 30, dichloromethane, Methylene chloride	75-09-2	1.5	1	
Dichloropropane, 1,2-	CH <sub>3</sub> CHClCH <sub>2</sub> Cl	α, β-Propylene dichloride, Dichloropropane, Propylene dichloride	78-87-5	7	4.5	
Dichlorosilane	SiH <sub>2</sub> Cl <sub>2</sub>	Dichlorosilane, DCS	4109-96-0	0.5-300	0.3	RH dependent
Diethoxymethoxyiranylsilane	C <sub>7</sub> H <sub>16</sub> O <sub>3</sub> Si	DEOMORS, Diethoxymethyl(2-oxiranyl)silane	798568-23-7	1-500	0.7	
Diethyl ether	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O	Ethoxyethane, Diethyl ether, Ethoxyethane, Et <sub>2</sub> O	60-29-7	1-500	0.7	
Diethylamine	C <sub>4</sub> H <sub>11</sub> N	n-Ethylethanamine	109-89-7	2.5	1.5	
Diethyltelluride	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> Te	(Ethyltellanyl)ethane, DETe	627-54-3	2	1.3	
Difluoromethane	CH <sub>2</sub> F <sub>2</sub>	HFC 32 R32	75-10-5	0.5-100	0.3	
Diglycolamine	C <sub>4</sub> H <sub>11</sub> NO <sub>2</sub>	2-(2-aminoethoxy)ethanol, Diethylene glycolamine; H <sub>2</sub> NC <sub>2</sub> H <sub>4</sub> OC <sub>2</sub> H <sub>4</sub> OH	929-06-6	5-500	3.5	
Dimethyl acetamide	C <sub>4</sub> H <sub>9</sub> NO	DMAC	127-19-5	4	2.7	
Dimethyl amine	C <sub>2</sub> H <sub>7</sub> N	DMA	124-40-3	6	4	
Dimethyl ether	(CH <sub>3</sub> ) <sub>2</sub> O	Methylether	115-10-6	3-500	2	
Dimethyl sulfoxide	C <sub>2</sub> H <sub>6</sub> OS	DMSO	67-68-5	4	2.7	
Dimethyldiethoxysilane	C <sub>6</sub> H <sub>16</sub> O <sub>2</sub> Si	Diethoxydimethylsilane, DMDEOS	78-62-6	0.7	0.5	
Dimethyldimethoxysilane	C <sub>4</sub> H <sub>12</sub> O <sub>2</sub> Si	Dimethoxydimethylsilane, DMDMOS	1112-39-6	0.7	0.5	
Dimethylformamide	HCON(CH <sub>3</sub> ) <sub>2</sub>	DMFA, N,N-dimethylmethanamide	68-12-2	2-800	1.3	
Dimethylphenylsilane	C <sub>6</sub> H <sub>5</sub> -SiH-(CH <sub>3</sub> ) <sub>2</sub>	(Dimethylsilyl)benzene	766-77-8	1-300	0.7	
Dimethylvinyl Disilazane	C <sub>8</sub> H <sub>19</sub> N <sub>4</sub> Si	Silanamine	7691-02-3	0.7	0.5	
Dimethylzinc	(CH <sub>3</sub> ) <sub>2</sub> Zn	MTG MSDS 114	544-97-8	5	3	
Dioxane	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	1,4-diethylene dioxide	123-91-1	1	0.7	
Dipropylamine	C <sub>6</sub> H <sub>15</sub> N	n-Propyl-1-propanamine	142-87-7	3.5	2	
Disilabutane, 1,4-	C <sub>2</sub> H <sub>10</sub> Si <sub>2</sub>	SX-79	4364-07-2	0.3-50	0.2	
Enflurane	C <sub>3</sub> H <sub>2</sub> ClF <sub>5</sub> O	Ethrane, Efrane	13838-16-9	0.5-100	0.3	
Epichlorohydrin	ClCH <sub>2</sub> C <sub>2</sub> H <sub>3</sub> O	Chloromethyloxirane	106-89-8	4	2.7	
Ethanol	C <sub>2</sub> H <sub>6</sub> O	Ethyl alcohol	64-17-5	3-700	2	
Ethanolamine	NH <sub>2</sub> -C <sub>2</sub> H <sub>4</sub> OH	monoethanolamine	141-43-5	5	3	
Ethoxyethanol, 2-	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	Ethyl Cellosolve, Ethylene glycol ethyl ether, 2EE	110-80-5	1.5	1	
Ethoxyethylacetate, 2-	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	Cellosolve acetate, EGMEA, 1-Acetoxy-2-ethoxyethane	111-15-9	1.5	1	
Ethyl 3-ethoxypropionate	C <sub>7</sub> H <sub>14</sub> O <sub>3</sub>	Ethyl ester	763-69-9	1	0.7	
Ethyl acetate	CH <sub>3</sub> COOC <sub>2</sub> H <sub>5</sub>	Acetic ether	141-78-6	0.5-300	0.3	
Ethyl acrylate	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	2-Propenoic acid ethyl ester, Ethyl propenoate, Acrylic acid ethyl ester	140-88-5	1-250	0.7	
Ethyl amine	C <sub>2</sub> H <sub>7</sub> N	Monoethylamine, Aminoethane, 1-Aminoethane, Ethamine	75-04-7	7	4.7	
Ethyl benzene	C <sub>8</sub> H <sub>10</sub>	Ethylbenzol, EB, Phenylethane	100-41-4	13-500	9	
Ethyl lactate	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	Lactic acid ethyl ester	687-47-8	1-500	0.7	
Ethyl pyruvate	C <sub>5</sub> H <sub>8</sub> O <sub>3</sub>	Pyruvic acid ethyl ester, ethyl 2-oxopropanoate	617-35-6	3.5	2.5	
Ethylene	CH <sub>2</sub> =CH <sub>2</sub>	Ethene	74-85-1	0.7-300	0.5	
Ethylene dichloride	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	Dichloroethane	107-06-2	2-1000	1.3	
Ethylene glycol	C <sub>2</sub> H <sub>6</sub> O <sub>2</sub>	1,2-Dihydroxyethane	107-21-1	2	1.2	
Ethylene oxide	C <sub>2</sub> H <sub>4</sub> O	EO, EtO	75-21-8	3-800	2	
Ethylidene norbornene	C <sub>9</sub> H <sub>12</sub>	5-Ethylidene-norbornene	16219-75-3	10 – 300	6.5	
Fluorinert FC3283	(C <sub>3</sub> F <sub>7</sub> ) <sub>3</sub> N	Fluorinert FC3283, Perfluorotripropylamine	338-83-0	0.3-30	0.2	
Fluorinert FC-40	C <sub>2</sub> 1N <sub>2</sub> F <sub>4</sub> 8	Fluorinert FC-40, Perfluorotri-n-butylamine mix with Perfluoro-n-dibutylmethylamine	51142-49-5	0.2-30	0.1	
Fluorinert FC-77	(C <sub>8</sub> F <sub>18</sub> ) <sub>n</sub> .(C <sub>8</sub> F <sub>16</sub> O) <sub>m</sub>	Perfluoro-compound C5-18 (avg MW 415), Ethyl nonafluorobutyl ether, Hydrofluoroether	86508-42-1, 52623-00-4	0.7	0.5	
Fluoromethane	CH <sub>3</sub> F	Methyl fluoride, R41	593-53-3	2 -250	1	
Formaldehyde	HCHO	Methanal, Methyl aldehyde	50-00-0	3	2	
Formamide	HCONH <sub>2</sub>	Methanamide	75-12-7	25	17	
Freon 11	CFCI <sub>3</sub>	Trichlorofluoromethane, Fluorotrichlorometane	75-69-4	0.2-100	0.1	
Freon 113/TF	CF <sub>3</sub> CCl <sub>3</sub>	Freon-TF, 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.6	0.4	
Freon 114	C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>	1,2-Dichlorotetrafluoroethane	76-14-2	0.8	0.5	

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Freon 116	C2F6	Hexafluoroethane, Perfluoroethane	76-16-4	0.3	0.2	
Freon 12	CF2Cl2	Dichlorodifluoromethane	75-71-8	0.6	0.4	
Freon 13	CClF3	Chlorotrifluoromethane	75-72-9	0.25	0.15	
Freon 134a	C2H2F4	1,1,1,2-Tetrafluoroethane, Tetrafluoroethane, HFC-134a, R-134a	811-97-2	0.3	0.2	
Freon 13B1	CF3Br	Trifluorobromoethane (R13B1)	75-63-8	0.3	0.2	
Freon 14	CF4	Carbon tetrafluoride	75-73-0	0.2-100 (or 0.05-5)	0.1	
Freon 23	CHF3	Trifluoromethane, Fluoroform	75-46-7	0.2-100	0.1	
Galden HT110	CF3-[(OCFCF3CF2)n-(OCF2)m]-OCF3	Propene, 1,1,2,3,3,3-hexafluoro, oxidized, polymerized	69991-67-9	0.5	0.3	
Galden HT135	CF3-[(OCFCF3CF2)n-(OCF2)m]-OCF3	1-Propene, 1,1,2,3,3,3-hexafluoro-, oxidized, polymd	69991-67-9	0.3	0.2	
Galden HT-200	CF3-[(OCFCF3CF2)n-(OCF2)m]-OCF3	Galden HT200, 1,1,2,3,3,3-hexafluoro propene, oxidized, polymerized	69991-67-9	0.2-20	0.1	
Galden HT70	CF3-[(OCFCF3CF2)n-(OCF2)m]-OCF3	Propene, 1,1,2,3,3,3-hexafluoro, oxidized, polymerized	69991-67-9	0.6	0.4	
Germane	GeH4	Germanium tetrahydride	7782-65-2	0.5	0.3	
Glutaraldehyde	C5H8O2	Pentane-1,5-dial, Pentanedial, Glutaric aldehyde	111-30-8	5	3.5	
Halothane	C2HBrClF3	Fluthane	151-67-7	0.6-60	0.4	
HCFC-141b	CCl2FCH3	Dichloro(1,1)fluoro(1), ethane	17-17-006	1.3	0.9	
HCFC-225ca	C3HF5Cl2	Dichloropentafluoropropane; R-225, cb (HCFC-225ca/cb/aa= CAS 127564-92-5)	422-56-0	2	1.3	
HCFC-225cb	C3HF5Cl2	Dichloropentafluoropropane	507-55-1	1.5	1	
HCFO-1233xf	CClF2CClCH2	2-Chloro-3,3,3-trifluoropropene	2730-62-3	3	2	
Heptafluorocyclopentene	C5HF7	HFCPE, SSY-38, I,3,3,4,4,S,S-Heptafluorocyclopentene	1892-03-1	0.5-150	0.3	
Heptanone, 2-	C7H14O	Methyl pentyl ketone	110-43-0	2	1.3	
Hexachlorobutadiene	C4Cl6	Hexachloro-1,3-butadiene, HCBd, HCDB	87-68-3	1	0.7	
Hexachloroethane	C2Cl6	Carbon hexachloride, Perchloroethane	67-72-1	0.2	0.1	
Hexafluoro-1,3-butadiene	C4F6	Hexafluorobutadiene	685-63-2	0.5-100	0.3	
Hexafluoro-2,5-dihydrothiophene	C4F6S	Thiophene, 2,2,3,4,5,5-hexafluoro-2,5-dihydro-	380-40-5	0.5 - 200	0.3	
Hexafluorobenzene	C6F6	Perfluorobenzene	392-56-3	0.5	0.3	
Hexafluoropropylene	C3F6	Hexafluoropropene, Perfluoropropene, FC-1216	116-15-4	0.7	0.5	
Hexahydrophthalic anhydride	C8H10O13	Cyclohexanedicarboxylic anhydride	85-42-7	0.1	0.05	
Hexamethyl diamine	C6H16N2	Hexamethylenediamine, Hexane-1,6-diamine	124-09-4	3.5	2.5	
Hexamethyldisilane	C6H18Si2	Permethylsilane	1450-14-2	0.7	0.5	
Hexane, n-	C6H14	n-Hexane	110-54-3	1.5-300	1	as THC
Hexanes	C6H14	Mixed C6 isomers	73513-42-5	1.5-300	1	as THC
HFC-1132a	C2H2F2	1,1-Difluoroethylene Vinylidene fluoride (VF2)	75-38-7	1.5	1	
HFE71	C5F9OH3	Methoxy-nonafluorobutane	163702-07-6	1	0.7	
HFE-7200	C4F9OC2H5	Ethoxy-nonafluorobutane	163702-05-4	0.7	0.5	
HFE-7500	C9H5F15O	2-(Trifluoromethyl)-3-ethoxydodecafluorohexane	297730-93-9	0.6	0.4	
HMDS	(CH3)3SiNHSi(CH3)3	Hexamethyldisilazane, Bis(trimethylsilyl)amine	999-97-3	0.5 - 200	0.5	RH dependent
Hydrogen bromide	HBr	HBr	10035-10-6	2-1000	2	RH dependent
Hydrogen chloride	HCl	Hydrogen chloride, Chlorane, Chlorohydric acid	7647-01-0	3-100	3	RH dependent
Hydrogen cyanide	HCN	Hydrocyanic acid	74-90-8	2-300	1.5	RH dependent
Hydrogen fluoride	HF	HF	7664-39-3	2-500	1.5	RH dependent
Iron pentacarbonyl	Fe(CO)5	Iron carbonyl	13463-40-6	0.1	0.1	
Isobutane	C4H10	2-Methylpropane, methylprpane	75-28-5	0.7	0.5	as THC
Isobutylene	C4H8	2-Methylpropene, Isobutene, 2-methylpropylene	115-11-7	1.5	1	
Isoflurane	C3H2ClF5O	Forane	26675-46-7	0.6-50	0.4	
Isopentane	C5H12	2-methylbutane	78-78-4	1-200 (50-12000)	0.5 (30)	as THC
Isophorone	C9H14O	3,5,5-Trimethyl-2-cyclohexene-1-one, 1,1,3-Trimethyl-3-cyclohexene-5-one, IP	78-59-1	1	0.7	as THC

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Isopropyl acetate	CH <sub>3</sub> COOCH(CH <sub>3</sub> ) <sub>2</sub>	Isopropyl ethanoate, 2-propyl acetate	108-21-4	0.5	0.3	
Isopropyl alcohol	CH <sub>3</sub> CHOHCH <sub>3</sub>	Isopropanol, 2-propanol	67-63-0	5-500	3	
Isopropyl amine	C <sub>3</sub> H <sub>9</sub> N	Propan-2-amine, 2-propylamine	75-31-0	4	2.5	
Kerosene	-	Kerosine, paraffin, fuel oil No 5	8008-20-6	1	0.6	
Limonene, d-	C <sub>10</sub> H <sub>16</sub>	1-Methyl-4-(1-methylethenyl)-cyclohexene; 4-Isopropenyl-1-methylcyclohexene; DL-limonene	5989-54-8	5	3	
Methane	CH <sub>4</sub>	Methyl hydride, biogas	74-82-8	5-500	3	
Methanol	CH <sub>3</sub> OH	Methyl alcohol	67-56-1	2-500	1	
Methoxyethanol, 2-	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	Methyl cellosolve, CH <sub>3</sub> COOCH <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub>	109-86-4	2.5	1.7	
Methoxyethyl Acetate, 2-	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	Methyl Cellosolve Acetate, EGMEA, CH <sub>3</sub> COOCH <sub>2</sub> CH <sub>2</sub> OCH <sub>3</sub>	110-49-6	1.5	1	
Methoxyethyl ether, 2-	C <sub>6</sub> H <sub>14</sub> O <sub>3</sub>	Diglyme; 1-Methoxy-2-(2-methoxyethoxy)ethane; DEDM	111-96-6	0.4	0.3	
Methyl 3-methoxyacrylate	C <sub>5</sub> H <sub>8</sub> O <sub>3</sub>	Methyl Trans-3-Methoxyacrylate	5788-17-0	1	0.6	
Methylmethoxypolycarbosilane		Methyl(methoxy)polycarbosilane	n/a	1.5	1	
Methyl 3-methoxypropionate	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	3-Methoxy-propanoicacidmethylester	3852-09-3	1.5	1	
Methyl acrylate	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>	Methyl acrylate, methyl propenoate	96-33-3	1	0.5	
Methyl amine	CH <sub>3</sub> NH <sub>2</sub>	Aminomethane, Methanamine, MMA	74-89-5	4	2.5	
Methyl ethyl ketone	C <sub>4</sub> H <sub>8</sub> O	2-Butanone, MEK	78-93-3	5-300	3	
Methyl isobutyl ketone	CH <sub>3</sub> COCH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	4-Methyl-2-pentanone	108-10-1	5	3	
Methyl silane	CH <sub>6</sub> Si	Methylsilane, 1MS	992-94-9	1	0.6	
Methyldiethoxysilane	C <sub>5</sub> H <sub>14</sub> O <sub>2</sub> Si	Diethoxymethylsilane, dems	2031-62-1	0.7	0.5	
Methyldimethoxysilane	C <sub>3</sub> H <sub>9</sub> -O <sub>2</sub> Si	Dimethoxydimethylsilane, DMDMOS	16881-77-9	0.35	0.2	
Methylethanol amine	C <sub>3</sub> H <sub>9</sub> NO	2-Methylaminoethanol	109-63-1	8-1000	5	
Methylmethacrylate	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	2-Methyl-2-propenoic acid methyl ester	80-62-6	n/a	n/a	
Methylpyrrolidinone, n-	C <sub>5</sub> H <sub>9</sub> NO	n-Methyl-2-pyrrolidone , NMP, 1-methyl-2-pyrrolidinone	872-50-4	7-1000	4.5	
Methyl-t-butylether	C <sub>5</sub> H <sub>12</sub> O	MTBE	1634-04-4	1.5-300	1	
Methyltriethoxysilane	C <sub>7</sub> H <sub>18</sub> O <sub>3</sub> Si	Trimethoxy(ethyl)silane	2031-67-6	0.5-300	0.3	
Methyltrimethoxysilane	C <sub>4</sub> H <sub>12</sub> O <sub>3</sub> Si	Trimethoxy(methyl)silane	1185-55-3	0.5-300	0.3	
Naphthalene	C <sub>10</sub> H <sub>8</sub>	Bicyclo[4.4.0]deca-1,3,5,7,9-pentene, White Tar,	91-20-3	2	1.5	
Nitrogen dioxide	NO <sub>2</sub>	Nitrogen dioxide	10102-44-0	1-100	0.6	under water
Nitrogen monoxide	NO	Nitric oxide; Nitrogen oxide	10102-43-9	7-500	4.5	under water
Nitrogen trifluoride	NF <sub>3</sub>	NF <sub>3</sub>	7783-54-2	0.5-200	0.3	
Nitrous oxide	N <sub>2</sub> O	Nitrous oxide, Laughing gas	10024-97-2	0.5 -50, 10-1000	0.3	
Octafluorocyclobutane	C <sub>4</sub> F <sub>8</sub>	RC318	115-25-3	2	1.5	
Octafluorocyclopentene	C <sub>5</sub> F <sub>8</sub>	Perfluorocyclopentene	549-40-0	0.3 -100	0.2	
Octafluoropropane	C <sub>3</sub> F <sub>8</sub>	Perfluoropropane, R-218	76-19-7	0.1-100	0.07	
Octamethylcyclotetrasiloxane	C <sub>8</sub> H <sub>24</sub> O <sub>4</sub> Si <sub>4</sub>	Cyclotetrasiloxane, OMCTS	556-67-2	0.2	0.1	
Octane	C <sub>8</sub> H <sub>18</sub>	n-Octane, CH <sub>3</sub> (CH <sub>2</sub> ) <sub>6</sub> CH <sub>3</sub>	111-65-9	1	0.6	as THC
Oxygen difluoride	OF <sub>2</sub>	Difluorine monoxide; Oxygen fluoride	7783-41-7	4	2.5	
Ozone	O <sub>3</sub>	Trixygen	10028-15-6	2-500	1.5	
Pentane	C <sub>5</sub> H <sub>12</sub>	n-Pentane,	109-66-0	1.5-200	1	as THC
Pentanol	C <sub>5</sub> H <sub>12</sub> O	1 - pentanol	71-41-0	4	2.5	
Pentanone, 2-	C <sub>5</sub> H <sub>10</sub> O	Methyl propyl ketone	107-87-9	5	3	
Pentene, 1-	C <sub>5</sub> H <sub>10</sub>	1-Pentene	109-67-1	4	2.5	
Perchloroethylene	C <sub>2</sub> Cl <sub>4</sub>	Tetrachloroethylene	127-18-4	0.7-150	0.5	
Perfluorohexane	C <sub>6</sub> F <sub>14</sub>	Tetradecafluorohexane, Fluorinert FC72 , FC-72	355-42-0	1.5	1	
Perfluoropropylvinylether	C <sub>5</sub> F <sub>10</sub> O	PPVE	1623-05-8	0.5	0.3	
Petroleum ether	C <sub>7</sub> H <sub>7</sub> BrMg	Petroleum Spirits, Benzine, VM&P Naphtha	8032-32-4	1	0.7	as THC
Phenol	C <sub>6</sub> H <sub>5</sub> OH	Phenol, carboic acid, phenic acid	108-95-2	9	6	
Phosgene	COCl <sub>2</sub>	Carbonyl dichloride, CG; carbon dichloride oxide; carbon oxychloride	75-44-5	0.3	0.2	
Phosphine	PH <sub>3</sub>	PH <sub>3</sub>	7803-51-2	4-1000	2.5	under CO <sub>2</sub>

# ACM 100 / ACM150 Gas List

Chemical Name	Formula	Synonym	CAS Num.	ACM100 LDL-UDL (ppm)	ACM150 LDL (ppm)	Note
Phosphorus oxychloride	POCl <sub>3</sub>	Trichlorophosphorus oxide; Phosphoryl trichloride	10025-87-3	0.3	0.2	RH dependent
Pinene, beta	C <sub>10</sub> H <sub>16</sub>	β-pinene, 6,6-dimethyl- 2-methylenebicyclo [3.1.1] heptane, 2(10)-pinene, nopinene, pseudopinene	18172-67-3	3.5-600	2	
Porogen A	-	-	n/a	2	1.5	as THC
Propane	C <sub>3</sub> H <sub>8</sub>	Propane gas	74-98-6	3.5-500	2	as THC
Propionaldehyde	C <sub>3</sub> H <sub>6</sub> O	Propanal, Methylacetaldehyde	123-38-6	0.4	0.3	
Propylene	C <sub>3</sub> H <sub>6</sub>	Propene	115-07-1	4-300	3	
Propylene glycol	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	Methyl glycol	57-55-6	3	2	
Propylene glycol monomethyl ether	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	1-Methoxy-2-propanol	107-98-2	1.5	1	
Propyleneglycol monomethylether acetate	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	1-Methoxy-2-propyl acetate, PM acetate, PGMEA, PBR-IV, Photoresist Bead Remover IV; CH <sub>3</sub> CO <sub>2</sub> CH(CH <sub>3</sub> )CH <sub>2</sub> OCH <sub>3</sub>	108-65-6	1-300	0.7	
Pyridine	C <sub>5</sub> H <sub>5</sub> N	Azine	110-86-1	10-1500	6.5	
R-123	C <sub>2</sub> HF <sub>3</sub> Cl <sub>2</sub>	Dichlorotrifluoroethane	306-83-2	0.6	0.3	
R-1234yf	CH <sub>2</sub> =CFCF <sub>3</sub>	2,3,3,3-Tetrafluoroprop-1-ene, HFO-1234yf	754-12-1	3	2	
R-124	C <sub>2</sub> HCIF <sub>4</sub>	Genetron124, 1-Chloro-1,2,2,2-tetrafluoroethane	2837-89-0	0.5	0.3	
R-125	CHF <sub>2</sub> CF <sub>3</sub>	Pentafluoroethane, Genetron HFC 125	354-33-6	0.5	0.3	
R-244bb	C <sub>3</sub> H <sub>3</sub> ClF <sub>4</sub>	HCFC-244bb, 2-Chloro-1,1,1,2-tetrafluoropropane	421-73-8	0.5	0.3	
R-245fa	C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>	1,1,1,3,3-Pentafluoropropane; HFC-245fa;	460-73-1	0.3	0.2	
R404a		R-125/143a/134a (44±2/52±1/4±2)		0.5	0.3	
R407a		HFC-407A, (R-32/125/134a (20±2/40±2/40±2))		0.4	0.3	
R407c		R-32/125/134a (23±2/25±2/52±2)		0.6	0.4	
R4310	C <sub>5</sub> H <sub>2</sub> F <sub>10</sub>	1,1,1,2,2,3,4,5,5,5-Decafluoropentane, HFC-4310, Vertrel 4310, HFC-4310mee	138495-42-8	0.2	0.1	
R507a		R-507, R-507A, R-125/143a (50/50)		0.4	0.3	
Sevoflurane	C <sub>4</sub> H <sub>3</sub> F <sub>7</sub> O	Ultane	28523-86-6	0.6-60	0.4	
Silane	SiH <sub>4</sub>	Silicon tetrahydride	7803-62-5	0.5-200	0.3	
Silicon tetrachloride	SiCl <sub>4</sub>	Tetrachlorosilane	10026-04-7	1-50	0.6	RH dependent
Silicon tetrafluoride	SiF <sub>4</sub>	Tetrafluorosilane	7783-61-1	0.5-500	0.3	RH dependent
SSY-525 (SiNx etch gas by Zeon)			-	3 - 500	2	
Styrene	C <sub>8</sub> H <sub>8</sub>	Styrol	100-42-5	3-600	2	
Sulfur dioxide	SO <sub>2</sub>	Bisulfite	7746-09-5	6-300	4	RH dependent
Sulfur hexafluoride	SF <sub>6</sub>	Sulfur hexafluoride	2551-62-4	0.5-200 (0.06)	0.3/0.04	
Sulfuryl fluoride	SO <sub>2</sub> F <sub>2</sub>	Sulphuryl Fluoride; Sulfuryl Difluoride; Vikane	2699-79-8	1.5	1	
Terpinene, alpha	C <sub>10</sub> H <sub>16</sub>	1,3-Cyclohexadiene	99-86-5	2.5	1.7	as THC
Tert-Butylamine	C <sub>4</sub> H <sub>11</sub> N	2-Methylpropan-2-amine, (CH <sub>3</sub> ) <sub>3</sub> CNH <sub>2</sub>	75-64-9	1.5-100	1	
Tetrachloropropnen, 1,1,2,3-; (TECP)	C <sub>3</sub> H <sub>2</sub> Cl <sub>4</sub>	TECP; 1,1,2,3-Tetrachloropropene, 1123-tetCPE, HCC-1230xa, HCO-1230, Oxy TCP	10436-39-2	5	4	
Tetraethoxysilane	C <sub>8</sub> H <sub>20</sub> O <sub>4</sub> Si	TEOS; Tetraethyl orthosilicate	78-10-4	2-200	2	RH dependent
Tetraethyleneglycol diacrylate	C <sub>4</sub> H <sub>22</sub> O <sub>7</sub>	Tetraethylene glycol diacrylate; Polyethylene glycol 200	17831-71-9	2	1.4	
Tetrafluoroethylene	C <sub>2</sub> F <sub>4</sub>	Perfluoroethylene	116-14-3	0.6	0.4	
Tetrahydrofuran	C <sub>4</sub> H <sub>8</sub> O	THF	109-99-9	3.5	2.5	
Tetrahydrofuran alcohol	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	THFA,	97-99-4	5.5	3.5	
(dimethylamine)	C <sub>8</sub> H <sub>24</sub> N <sub>4</sub> Ti	Dimethyl[tris(dimethylamino)titanio]amine	3275-24-9	3	2	RH dependent
Tetrakis(ethylamino)silane			17865-94-0	0.6	0.5	
Tetrakis(trifluorophosphorus)nickel	Ni(PF <sub>3</sub> ) <sub>4</sub>	NITFP	13859-65-9	0.1	0.05	
Tetramethoxysilane	(CH <sub>3</sub> O) <sub>4</sub> Si	TMOS; Tetramethyl orthosilicate; Silicon methoxide	681-84-5	0.6	0.5	
Tetramethyl cyclotetrasiloxane	(HSiCH <sub>3</sub> O) <sub>4</sub>	TMCTS	2370-88-9	0.2	0.15	
Tetramethyl silane	(CH <sub>3</sub> ) <sub>4</sub> Si	TMS	75-76-3	0.3 - 150	0.2	
Tetramethyl-1,3-disilacyclobutane, 1,1,3,3-	C <sub>6</sub> H <sub>16</sub> Si <sub>2</sub>	1,1,3,3-Tetramethyl-1,3-disilacyclobutane (Me <sub>2</sub> SiCH <sub>2</sub> ) <sub>2</sub>	1627-98-1	0.4	0.2	
Tetramethylammonium hydroxide	(CH <sub>3</sub> ) <sub>4</sub> NOH	TMAH	75-59-2	1-300	0.7	

# ACM 100 / ACM150 Gas List

Chemical Name	Formula	Synonym	CAS Num.	ACM100 LDL-UDL (ppm)	ACM150 LDL (ppm)	Note
Tetramethyldisilylethylene	C6H18Si2	1,1,4,4-Tetramethyldisilylethylene, TMDSE	20152-11-8	0.2	0.15	
Tetramethyldisiloxane, 1,1,3,3-	C4H14OSi2	Dimethylsilyl ether	3277-26-7	0.5	0.3	
Tetramethylene sulfone	C4H8O2S	Sulfolane,	126-33-0	3	2	
Tetravinyl tetramethyl cyclotetrasiloxane	C12H24O4Si4	tetramethyltetravinylcyclotetrasiloxane	27342-69-4	0.3	0.2	
Toluene	C7H8	Toluene	108-88-3	2-300	1.3	as THC
Trichloroethane, 1,1,1-	C2H3Cl3	Methyl chloroform, R-140a, Chloroethene, Solvent111; CH3CCl3	71-55-6	1-500	0.7	
Trichloroethane, 1,1,2-	C2H3Cl3	Vinyl trichloride	79-00-5	6	4	
Trichloroethylene	C2HCl3	TCE, trichloroethene,	79-01-6	2	1.3	
Trichlorosilane	HSiCl3	TCS;	10025-78-2	decompose on contact with moisture in air		
Triethoxysilane	C6H16O3Si	(OC2H5)3SiH	998-30-1	0.5	0.3	
Triethyl borate	(C2H5O)3B	Triethoxyborine	150-46-9	1	0.7	
Triethyl phosphate	(CH3CH2)3PO4	TEP	78-40-0	0.5	0.3	
Triethylamine	(C2H5)3N	TEN	121-44-8	2.5	1.7	
Trifluoroethanethiol	C2H3F3S	TFET	1544-53-2	0.5	0.3	
Trifluoropropyne (TFPY)	C3HF3	3,3,3-Trifluoropropyne	661-54-1	0.5	0.3	
Tri-isopropylsilane	C9H22Si	[(CH3)2CH]3SiH	6486-79-6	0.6	0.4	
Trimthoxysilane	C3H10O3Si	(CH3O)3SiH	2487-90-3	0.3	0.2	
Trimethyl amine	N(CH3)3	N,N-Dimethylmethylamine	75-50-3	4.5	3	
Trimethyl borate	(CH3O)3B	Trimethoxyborane	121-43-7	1	0.7	
Trimethyl phosphate	(CH3)3PO4	TMP, Phosphoric acid trimethyl ester, methyl phosphate	512-56-1	0.7	0.5	
Trimethyl phosphite	(CH3O)3P	TMP, TMPI	121-45-9	0.3	0.2	
Trimethyl silane	C3H10Si	3MS	993-07-7	0.8-100	0.5	
Trimethyl arsine	As(CH3)H	AsMe3, TMAs	593-88-4	8	6	
Trimethyl boron	B(CH3)3	Trimethylborane, Trimethylborine	593-90-8	4-1000	2.5	
Trimethylmethoxy silane	C4H12OSi	Methoxytrimethylsilane	1825-61-2	1	0.7	
Trimethylsilyl acetylene	C5H10Si	TMSA, Ethynyltrimethylsilane	1066-54-2	0.7	0.5	
Trimethylsilyl acetylene, bis	C2(Si(CH3)3)2	BTMSA, Bis(trimethylsilyl)acetylene	14630-40-1	0.5	0.3	
Trimethylsilyl imidazole	C6H12N2Si	TMSI, TMS-Imidazol	18156-74-6	7	4.5	
Trimethylsilylmethane, bis	[(CH3)3Si]2CH2	Bis(trimethylsilyl)methane; Methylenebis(trimethylsilane)	2117-28-4	0.2	0.15	
Trimethylvinylsilane (TMVS)	(CH3)3SiCHCH2	TMVS	754-05-2	1.5	1	
Trivinyl-trimethylcyclotrisiloxane	C9H18O3Si3	1,3,5-Trivinyl-1,3,5-trimethylcyclotrisiloxane,	3901-77-7	0.1	0.1	
Vinyl acetate	C4H6O2	Acetic acid ethenyl ester	108-05-4	0.4-100	0.25	
Vinyl chloride	C2H3Cl	VCM	75-01-4	4-600	2.5	
Vinylmethyldiethoxysilane	C7H16O2Si	Methylvinyl-diethoxysilane, Diethoxymethylvinylsilane	5507-44-8	0.6	0.4	
Vinylmethyldimethoxysilane	C5H12O2Si	Dimethylvinylphenylsilane; Methylvinyl-dimethoxysilane,	16753-62-1	0.4	0.25	
Vinylphenylmethylsilane	C9H12Si	Methylvinylphenylsilane; Vinylphenylmethylsilane; (CH2=CH)-SiH-(CH3)(C6H5)	17875-39-6	0.8-500	0.5	
Xylene, m-	C8H10	1,3-Dimethylbenzene	108-38-3	5	3	as THC
Xylene, o-	C8H10	1,2 – Dimethylbenzene	95-47-6	1	0.6	as THC
Xylenes, p-	C6H4(CH3)2	p-Xylol	106-42-3	5	3	as THC
Xylenes	C6H4(CH3)2	Xylol	1330-20-7	3-300	2	as THC

Note: \*Note: spc was made with methanol mixture. TEAs peak did not shown.  
 As THC: detect as total hydro carbons (THC) as spectra are in common total hydrocarbon IR region  
 Under Water: As Spectra peaks are under water spectra, LDL and detection levels are influenced by water/moisture level in the application  
 Under CO2: As Spectra peaks are under CO2 spectra, LDL and detection levels are influenced by CO2 level in the application  
 RH dependent: LDL will be higher depending on sample humidity condition