



## EXEMPT VOC LIST

VOC (Volatile Organic Compounds) - For all areas in Missouri VOC means any compound of carbon, **excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate**, that participates in atmospheric photochemical reactions to produce ozone. The following compounds will **not** be considered VOC because of their known lack of participation in the atmospheric reactions to produce ozone:

1,1,1,-trichloroethane (methyl chloroform);  
1,1,1,3,3,3-hexafluoropropane (HFC-236fa)  
1,1,2,2,3-pentafluoropropane (HFC-245ca)  
1,1,2,3,3-pentafluoropropane (HFC-245ea)  
1,1,1,2,3-pentafluoropropane (HFC-245eb)  
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee)  
1,1,1,3,3-pentafluoropropane (HFC-245fa)  
1,1,1,2,3,3-hexafluoropropane (HFC-236ea)  
1,1,1,3,3-pentafluorobutane (HFC-365mfc)  
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)  
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)  
1-chloro-1-fluoroethane (HCFC-151a)  
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub> or HFE-7100)  
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>)  
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub> or HFE-7200)  
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>)  
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)  
acetone;  
1-chloro-1,1-difluoroethane (HCFC-142b);  
chlorodifluoromethane (HCFC-22);  
chlorofluoromethane (HCFC-31)  
chloropentafluoroethane (CFC-115);  
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);  
dichlorodifluoromethane (CFC-12);  
1,1-dichloro-1-fluoroethane (HCFC-141b);  
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);  
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);  
1,1-difluoroethane (HFC-152a);  
difluoromethane (HFC-32)  
ethane;  
ethylfluoride (HFC-161)  
methane;  
methyl acetate

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methylene chloride;  
parachlorobenzotrifluoride (PCBTF)  
pentafluoroethane (HFC-125);  
Perchloroethylene (tetrachloroethylene);  
1,1,2,2-tetrafluoroethane (HFC-134);  
1,1,1,2-tetrafluoroethane (HFC-134a);  
trichlorofluoromethane (CFC-11);  
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);  
1,1,1-trifluoroethane (HFC-143a);  
trifluoromethane (HFC-23);

1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub>, HFE-7000);  
3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoro-methyl) hexane (HFE-7500);  
1,1,1,2,3,3,3-heptafluoropropane (HFE-227ea);  
methylformate (HCOOCH<sub>3</sub>);  
[ cyclic, branched or linear, completely methylated siloxanes; and perfluorocarbon compounds which fall into these classes]:

- (i) cyclic, branched, or linear, completely fluorinated alkanes;
- (ii) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (iii) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (iv) sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorines.

VOC may be measured by a reference method, an equivalent method, an alternative method or by procedures specified in either 10 CSR 10-6.030 or 40 CFR part 60. These methods and procedures may measure nonreactive compounds, so an owner or operator must exclude these nonreactive compounds when determining compliance.

The following compound(s) are VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butylacetate

Updated 1/2/08