

## GREENHOUSE GASES

<b>Chemical Names</b>	<b>Chemical Formula</b>	<b>Synonyms</b>	<b>CAS #</b>
Carbon Dioxide	CO <sub>2</sub>	carbonic anhydride	<b>124-38-9</b>
Methane	CH <sub>4</sub>	natural gas; methyl hydride; R 50 (refrigerant)	<b>74-82-8</b>
Nitrous Oxide	N <sub>2</sub> O	dinitrogen monoxide; dinitrogen oxide; hyponitrous acid anhydride; laughing gas	<b>10024-972</b>
Sulfur Hexafluoride	SF <sub>6</sub>	sulfur fluoride	<b>2551-62-4</b>
<b>Hydrofluorocarbons (HFCs)</b>			
1. Trifluoromethane (HFC-23)	CHF <sub>3</sub>	fluoroform; methyl trifluoride; carbon trifluoride; R 23; Arcton 1; Freon 23; Genetron 23; Halocarbon 23	<b>75-46-7</b>
2. Difluoromethane (HFC-32)	CH <sub>2</sub> F <sub>2</sub>	methylene fluoride; carbon fluoride hydride; Freon 32; Genetron 32; R 32	<b>75-10-5</b>
3. Pentafluoroethane (HFC-125)	CHF <sub>2</sub> CF <sub>3</sub>	1,1,1,2,2-Pentafluoroethane; Genetron 125; R 125	<b>354-33-6</b>
4. 1,1,1,2-Tetrafluoroethane (HFC-134a)	CH <sub>2</sub> FCF <sub>3</sub>	1,2,2,2-Tetrafluoroethane; Norflurane; R 134a	<b>811-97-2</b>
5. 1,1,1-Trifluoroethane (HFC-143a)	CH <sub>3</sub> CF <sub>3</sub>	methyl fluorofrom; Freon 143; R 143a	<b>420-46-2</b>
6. 1,1-Difluoroethane (HFC-152a)	CH <sub>3</sub> CHF <sub>2</sub>	ethylidene fluoride; Freon 152a; Genetron 152a; R 152a; Genetron 100; Halocarbon 152A; Dymel 152a	<b>75-37-6</b>
7. 1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea)	(F <sub>3</sub> C) <sub>2</sub> CHF	2H- Heptafluoropropane; Apaflurane; Freon 227ea; R 227; R 227ea	<b>431-89-0</b>
8. 1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)	(F <sub>3</sub> C) <sub>2</sub> CH <sub>2</sub>	Bis(trifluoromethyl)methane; R 236fa	<b>690-39-1</b>
9. 1,1,1,2,3,4,4,5,5,5-Decafluoropentane (HFC-4130mee)	C <sub>5</sub> H <sub>2</sub> F <sub>10</sub>	Expanded formula – CF <sub>3</sub> CFHCFHCF <sub>2</sub> CF <sub>3</sub> 2H,3H-Perfluoropentane	<b>138495-42-8</b>
<b>Perfluorohydrocarbons (PFCs)</b>			
1. Tetrafluoromethane	CF <sub>4</sub>	Carbon tetrafluoride; perfluoromethane; Arcton 0; Freon 14; Halon 14; Halocarbon 14; R 14	<b>75-73-0</b>
2. Hexafluoroethane	C <sub>2</sub> F <sub>6</sub>	Perfluoroethane; Freon 116; Fluorocarbon 116; R 116	<b>76-16-4</b>
3. Decafluorobutane	C <sub>4</sub> F <sub>10</sub>	Perfluorobutane; Perfluoro-n-butane	<b>355-25-9</b>
4. Tetradecafluorohexane	C <sub>6</sub> F <sub>14</sub>	Perfluoro-n-hexane; Perfluorohexane; Fluorinert FC72; Flutec PP1	<b>355-42-0</b>

Prepared by Delaware Air Quality Management Section, DNREC from numerous sources – 3/3/06