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## Toxic substances list: schedule 1

Updated Schedule 1 as of May 12, 2021

- 1. Chlorobiphenyls that have the molecular formula  $C_{12}H_{(10-n)}Cl_n$  in which "n" is greater than 2
- 2. <u>Dodecachloropentacyclo [5.3.0.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>] decane (Mirex)</u>
- 3. <u>Polybrominated biphenyls that have the molecular formula  $C_{12}H_{(10-n)}Br_n$  in which "n" is greater than 2</u>
- 4. <u>Chlorofluorocarbon: totally halogenated chlorofluorocarbons that</u> have the molecular formula  $C_nCl_xF_{(2n+2-x)}$
- 5. <u>Polychlorinated terphenyls that have a molecular formula  $C_{18}H_{(14-n)}Cl_n$  in which "n" is greater than 2</u>
- 6. Asbestos
- 7. <u>Lead</u>
- 8. Mercury and its compounds
- 9. Vinyl chloride
- 10. <u>Bromochlorodifluoromethane that has the molecular formula</u> <u>CF<sub>2</sub>BrCl</u>
- 11. Bromotrifluoromethane that has the molecular formula CF<sub>3</sub>Br
- 12. Dibromotetrafluoroethane that has the molecular formula C<sub>2</sub>F<sub>4</sub>Br<sub>2</sub>
- 13. <u>Fuel containing toxic substances that are dangerous goods within</u> the meaning of section 2 of the Transportation of Dangerous Goods

## Act, 1992 and that

- (a) are neither normal components of the fuel nor additives designed to improve the characteristics or the performance of the fuel or
- **(b)** are normal components of the fuel or additives designed to improve the characteristics or performance of the fuels, but are present in quantities or concentrations greater than those generally accepted by industry standards
- 14. Dibenzo-para-dioxin that has the molecular formula of C<sub>12</sub>H<sub>8</sub>O<sub>2</sub>
- 15. <u>Dibenzofuran that has the molecular formula C<sub>12</sub>H<sub>8</sub>O</u>
- 16. <u>Polychlorinated dibenzo-para-dioxins that have the molecular formula  $C_{12}H_{(8-n)}O_2Cl_n$  in which "n" is greater than 2</u>
- 17. Polychlorinated dibenzofurans that have the molecular formula  $C_{12}H_{(8-n)}OCl_n$  in which "n" is greater than 2
- 18. <u>Tetrachloromethane (carbon tetrachloride) CCl<sub>4</sub></u>
- 19. 1,1,1-trichloroethane (methyl chloroform) CCl<sub>3</sub>-CH<sub>3</sub>
- 20. Bromofluorocarbons other than those set out in items 10 to 12
- 21. <u>Hydrobromofluorocarbons that have the molecular formula</u>  $C_nH_xF_yBr_{(2n+2-x-y)}$  in which  $0 < n \le 3$
- 22. Methyl bromide
- 23. Bis(chloromethyl) ether that has the molecular formula  $C_2H_4Cl_2O$
- 24. Chloromethyl methyl ether that has the molecular formula C<sub>2</sub>H<sub>5</sub>ClO
- 25. <u>Hydrochlorofluorocarbons that have the molecular formula</u>  $\underline{C_nH_xF_yCl_{(2n+2-x-y)} \text{ in which } 0 < n < 3}$
- 26. <u>Benzene that has the molecular formula C<sub>6</sub>H<sub>6</sub></u>
- 27. <u>(4-Chlorophenyl)cyclopropylmethanone, O-[(4-nitrophenyl)methyl]oxime that has the molecular formula C<sub>17</sub>H<sub>15</sub>ClN<sub>2</sub>O<sub>3</sub></u>
- 28. <u>Inorganic arsenic compounds</u>
- 29. <u>Benzidine and benzidine dihydrochloride, that have the molecular formula  $C_{12}H_{12}N_2$  and  $C_{12}H_{12}N_2 \cdot 2HCl$ , respectively</u>

- 30. Bis(2-ethylhexyl)phthalate
- 31. Inorganic cadmium compounds
- 32. Chlorinated wastewater effluents
- 33. Hexavalent chromium compounds
- 34. <u>Creosote-impregnated waste materials from creosote-contaminated</u> <u>sites</u>
- 35. 3,3'-Dichlorobenzidine
- 36. <u>1,2-Dichloroethane</u>
- 37. Dichloromethane
- 38. Effluents from pulp mills using bleaching
- 39. Hexachlorobenzene
- 40. Inorganic fluorides
- 41. Refractory ceramic fibre
- 42. Oxidic, sulphidic and soluble inorganic nickel compounds
- 43. Polycyclic aromatic hydrocarbons
- 44. Tetrachloroethylene
- 45. Trichloroethylene
- 46. <u>Tributyltetradecylphosphonium chloride that has the molecular</u> formula C<sub>26</sub>H<sub>56</sub>P·Cl
- 47. Bromochloromethane, that has the molecular formula CH<sub>2</sub>BrCl
- 48. Acetaldehyde, which has the molecular formula  $C_2H_4O$
- 49. 1,3-Butadiene, which has the molecular formula C<sub>4</sub>H<sub>6</sub>
- 50. Acrylonitrile, which has the molecular formula C<sub>3</sub>H<sub>3</sub>N
- 51. Respirable particulate matter less than or equal to 10 microns
- 52. Acrolein, which has the molecular formula  $C_3H_4O$
- 53. Ammonia dissolved in water
- 54. Nonylphenol and its ethoxylates
- 55. Effluents from textile mills that use wet processing
- 56. <u>Inorganic chloramines</u>, which have the molecular formula  $NH_nCl_{(3-n)}$ , where n = 0, 1 or 2
- 57. Ethylene oxide, which has the molecular formula H<sub>2</sub>COCH<sub>2</sub>

- 58. Formaldehyde, which has the molecular formula CH<sub>2</sub>O
- 59. N-Nitrosodimethylamine, which has the molecular formula C<sub>2</sub>H<sub>6</sub>N<sub>2</sub>O
- 60. Gaseous ammonia, which has the molecular formula NH<sub>3</sub>(g)
- 61. Ozone, which has the molecular formula O<sub>3</sub>
- 62. Nitric oxide, which has the molecular formula NO
- 63. Nitrogen dioxide, which has the molecular formula NO<sub>2</sub>
- 64. Sulphur dioxide, which has the molecular formula SO<sub>2</sub>
- 65. <u>Volatile organic compounds that participate in atmospheric photochemical reactions, excluding the following:</u>
  - (a) methane
  - (b) ethane
  - (c) methylene chloride (dichloromethane)
  - (d) 1,1,1-trichloroethane (methyl chloroform)
  - (e) 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
  - **(f)** trichlorofluoromethane (CFC-11)
  - (g) dichlorodifluoromethane (CFC-12)
  - (h) chlorodifluoromethane (HCFC-22)
  - (i) trifluoromethane (HFC-23)
  - (j) 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
  - (k) chloropentafluoroethane (CFC-115)
  - (I) 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123)
  - (m) 1,1,1,2-tetrafluoroethane (HFC-134a)
  - (n) 1,1-dichloro-1-fluoroethane (HCFC-141b)
  - (o) 1-chloro-1,1-difluoroethane (HCFC-142b)
  - (p) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
  - (q) pentafluoroethane (HFC-125)
  - (r) 1,1,2,2-tetrafluoroethane (HFC-134)
  - (s) 1,1,1-trifluoroethane (HFC-143a)
  - (t) 1,1-difluoroethane (HFC-152a)
  - (u) parachlorobenzotrifluoride (PCBTF)
  - (v) cyclic, branched or linear completely methylated siloxanes

- (w) acetone
- (x) perchloroethylene (tetrachloroethylene)
- (y) 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
- (z) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
- (**z.1**) 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee)
- (z.2) difluoromethane (HFC-32)
- (z.3) ethylfluoride (HFC-161)
- (**z.4**) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
- (z.5) 1,1,2,2,3-pentafluoropropane (HFC-245ca)
- **(z.6)** 1,1,2,3,3-pentafluoropropane (HFC-245ea)
- **(z.7)** 1,1,1,2,3-pentafluoropropane (HFC-245eb)
- (z.8) 1,1,1,3,3-pentafluoropropane (HFC-245fa)
- (**z.9**) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
- **(z.10)** 1,1,1,3,3-pentafluorobutane (HFC-365mfc)
- (z.11) chlorofluoromethane (HCFC-31)
- (z.12) 1-chloro-1-fluoroethane (HCFC-151a)
- (z.13) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
- (z.14) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ( $C_4F_9OCH_3$ )
- (z.15) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane  $((CF_3)_2CFCF_2OCH_3)$
- (z.16) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ( $C_4F_9OC_2H_5$ )
- (z.17) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane  $((CF_3)_2CFCF_2OC_2H_5)$
- **(z.18)** methyl acetate and perfluorocarbon compounds that fall into the following classes, namely
  - 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, or

- iv. sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine
- (z.19) 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (HFE-7000)
- (**z.20**) 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500)
- (z.21) 1,1,1,2,3,3,3-heptafluoropropane (HFC-227ea)
- (z.22) methyl formate (HCOOCH<sub>3</sub>)
- (z.23) t-butyl acetate
- (**z.24**) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethylpentane (HFE-7300)
- (z.25) propylene carbonate
- (z.26) dimethyl carbonate
- (z.27) trans-1,3,3,3-tetrafluoropropene (HFO-1234ze)
- (**z.28**) HCF<sub>2</sub>OCF<sub>2</sub>H (HFE-134)
- (z.29) HCF<sub>2</sub>OCF<sub>2</sub>OCF<sub>2</sub>H (HFE-236cal2)
- (z.30)  $HCF_2OCF_2CF_2OCF_2H$  (HFE-338pcc13)
- (z.31) HCF<sub>2</sub>OCF<sub>2</sub>OCF<sub>2</sub>CF<sub>2</sub>OCF<sub>2</sub>H
- (z.32) 2,3,3,3-tetrafluoropropene (HFO-1234yf)
- **(z.33)** trans 1-chloro-3,3,3-trifluoroprop-1-ene [HCFO-1233zd(E)]; and
- (z.34) 2-amino-2-methyl-1-propanol
- 66. Hexachlorobutadiene, which has the molecular formula C<sub>4</sub>Cl<sub>6</sub>
- 67. <u>Particulate matter containing metals that is released in emissions</u> <u>from copper smelters or refineries, or from both</u>
- 68. <u>Particulate matter containing metals that is released in emissions</u> <u>from zinc plants</u>
- 69. <u>Dichlorodiphenyltrichloroethane (DDT)</u>, which has the molecular formula  $C_{14}H_9Cl_5$
- 70. 2-butoxyethanol, which has the molecular formula  $C_6H_{14}O_2$
- 71. 2-methoxyethanol, which has the molecular formula C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>
- 72. Tetrachlorobenzenes, which have the molecular formula C<sub>6</sub>H<sub>2</sub>Cl<sub>4</sub>

- 73. Pentachlorobenzene, which has the molecular formula C<sub>6</sub>HCl<sub>5</sub>
- 74. Carbon dioxide, which has the molecular formula CO<sub>2</sub>
- 75. Methane, which has the molecular formula CH<sub>4</sub>
- 76. Nitrous oxide, which has the molecular formula N<sub>2</sub>O
- 77. <u>Hydrofluorocarbons that have the molecular formula  $C_nH_xF_{(2n+2-x)}$  in which 0 < n < 6</u>
- 78. The following perfluorocarbons:
  - (a) those that have the molecular formula  $C_nF_{2n+2}$  in which 0 < n < 7
  - (b) octafluorocyclobutane, which has the molecular formula C<sub>4</sub>F<sub>8</sub>
- 79. Sulphur hexafluoride, which has the molecular formula SF<sub>6</sub>
- 80. Methanone, bis[4-(dimethylamino)phenyl]-, which has the molecular formula  $C_{17}H_{20}N_2O$
- 81. 2-Butanone, oxime, which has the molecular formula C<sub>4</sub>H<sub>9</sub>NO
- 82. n-Butyl glycidyl ether, which has the molecular formula  $C_7H_{14}O_2$
- 83. Polybrominated diphenyl ethers that have the molecular formula  $\underline{C_{12}H_{(10-n)}Br_nO \text{ in which } 4 \leq n \leq 10}$
- 84. Perfluorooctane sulfonate and its salts
- 85. Compounds that contain one of the following groups:  $C_8E_{17}SO_2$ ,  $C_8E_{17}SO_3$  or  $C_8E_{17}SO_2N$
- 86. Methyloxirane, which has the molecular formula C<sub>3</sub>H<sub>6</sub>O
- 87. Ethyloxirane, which has the molecular formula C<sub>4</sub>H<sub>8</sub>O
- 88. Naphthalene, which has the molecular formula C<sub>10</sub>H<sub>8</sub>
- 89. Toluene diisocyanates, which have the molecular formula C<sub>9</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub>
- 90. 1,2-Benzenediol, which has the molecular formula C<sub>6</sub>H<sub>6</sub>O<sub>2</sub>
- 91. 1,4-Benzenediol, which has the molecular formula  $C_6H_6O_2$
- 92. <u>Hexane, 1,6-diisocyanato-, homopolymer, reaction products with alpha-fluoro-omega-2-hydroxyethyl-poly(difluoro- methylene), C16-20-branched alcohols and 1-octadecanol</u>
- 93. <u>2-propenoic acid, 2-methyl-, hexadecyl ester, polymers with 2-hydroxyethyl methacrylate, gamma-omega-perfluoro-C10-16-alkyl acrylate and stearyl methacrylate</u>

- 94. <u>2-propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with</u>
  <u>butyl 2-propenoate and 2,5-furandione, gamma-omega-perfluoro-</u>
  <u>C8-14-alkyl esters, tert-Bu benzenecarboperoxoate-initiated</u>
- 95. <u>2-propen-1-ol reaction products with pentafluoroiodoethane</u>
  <u>tetrafluoroethylene telomer, dehydroiodinated, reaction products</u>
  <u>with epichlorohydrin and triethylenetetramine</u>
- 96. Phenol, 4,4' -(1-methylethylidene)bis-, which has the molecular formula  $C_{15}H_{16}O_2$
- 97. Thiourea, which has the molecular formula CH<sub>4</sub>N<sub>2</sub>S
- 98. 1,3-Butadiene, 2-methyl-, which has the molecular formula C<sub>5</sub>H<sub>8</sub>
- 99. Oxirane, (chloromethyl)-, which has the molecular formula C<sub>3</sub>H<sub>5</sub>ClO
- 100. Colour Index Pigment Yellow 34
- 101. Colour Index Pigment Red 104
- 102. <u>Cyclotetrasiloxane, octamethyl-, which has the molecular formula</u>  $C_8H_{24}O_4Si_4$
- 103. Phenol, 2,4,6-tris(1,1-dimethylethyl)-, which has the molecular formula  $C_{18}H_{30}O$
- 104. Ethanol, 2-methoxy-, acetate, which has the molecular formula  $C_5H_{10}O_3$
- 105. 1-Propanol, 2-methoxy-, which has the molecular formula  $C_4H_{10}O_2$
- 106. 2-Naphthalenol, 1-[(4-methyl-2-nitrophenyl)azo]-, which has the molecular formula  $C_{17}H_{13}N_3O_3$
- 107. Ethanol, 2-(2-methoxyethoxy)-, which has the molecular formula  $C_5H_{12}O_3$
- 108. Sulfuric acid, diethyl ester, which has the molecular formula  $C_4H_{10}O_4S$
- 109. Sulfuric acid, dimethyl ester, which has the molecular formula  $C_2H_6O_4S$
- 111. 2-Propenamide, which has the molecular formula C<sub>3</sub>H<sub>5</sub>NO
- 112. Ethanol, 2-chloro-, phosphate (3:1), which has the molecular formula  $C_6H_{12}Cl_3O_4P$

- 113. Tributyltins, which contain the grouping  $(C_4H_9)_3Sn$
- 114. Tetrabutyltins, which have the molecular formula  $(C_4H_9)_4Sn$
- 115. Benzene, (chloromethyl)-, which has the molecular formula  $C_7H_7Cl$
- 116. Propane, 2-nitro-, which has the molecular formula C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>
- 117. Benzene, 1-methyl-2-nitro-, which has the molecular formula  $C_7H_7NO_2$
- 118. Phenol, 2,6-bis(1,1-dimethylethyl)-4-(1-methylpropyl)-, which has the molecular formula  $C_{18}H_{30}O$
- 119. Methylium, [4-(dimethylamino)phenyl]bis[4-(ethylamino)3-methylphenyl]-, acetate, which has the molecular formula  $C_{27}H_{34}N_3.C_2H_3O_2$
- 120. Chlorinated alkanes that have the molecular formula  $C_nH_xCl_{(2n+2-x)}$  in which  $10 \le n \le 20$
- 121. Benzene, 1,2-dimethoxy-4-(2-propenyl)-, which has the molecular formula  $C_{11}H_{14}O_2$
- 122. <u>Vanadium pentoxide</u>, which has the molecular formula V<sub>2</sub>O<sub>5</sub>
- 123. Oxirane, 2,2',2",2"'-[1,2-ethanediylidenetetrakis (4,1-phenyleneoxymethylene)]tetrakis-, which has the molecular formula  $C_{38}H_{38}O_8$
- 124. Bromic acid, potassium salt, which has the molecular formula KBrO<sub>3</sub>
- 125. <u>Polychlorinated naphthalenes</u>, which have the molecular formula  $C_{10}H_{8-n}Cl_n$  in which "n" is greater than 1
- 126. <u>Hydrazine, which has the molecular formula N<sub>2</sub>H<sub>4</sub></u>
- 127. <u>Hexabromocyclododecane</u>, which has the molecular formula  $C_{12}H_{18}Br_6$
- 128. Quinoline, which has the molecular formula C<sub>9</sub>H<sub>7</sub>N
- 129. Perfluorooctanoic acid, which has the molecular formula  $C_7F_{15}CO_2H$ , and its salts
- 130. Compounds that consist of a perfluorinated alkyl group that has the molecular formula  $C_nF_{2n+1}$  in which n=7 or 8 and that is directly

- bonded to any chemical moiety other than a fluorine, chlorine or bromine atom
- 131. Perfluorocarboxylic acids that have the molecular formula  $C_nF_{2n+1}CO_2H$  in which  $8 \le n \le 20$  and their salts
- 132. Compounds that consist of a perfluorinated alkyl group that has the molecular formula  $C_n F_{2n+1}$  in which  $8 \le n \le 20$  and that is directly bonded to any chemical moiety other than a fluorine, chlorine or bromine atom
- 133. Plastic microbeads that are ≤ 5 mm in size
- 134. The following petroleum and refinery gases:
  - (a) tail gas (petroleum), catalytic polymerized naphtha fractionation stabilizer (a complex combination of hydrocarbons obtained from the fractionation stabilization products that result from the polymerization of naphtha consisting predominantly of hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_4$ )
  - **(b)** fuel gases (a combination of light gases consisting predominantly of hydrogen or low molecular weight hydrocarbons or both)
  - (c) hydrocarbons,  $C_2$ - $C_4$ ,  $C_3$ -rich (a complex combination of hydrocarbons obtained from a treating process to remove sulphur and other acidic compounds consisting of hydrocarbons having carbon numbers in the range of  $C_2$  through  $C_4$ , predominantly propane and propene)
  - (d) gases (petroleum), butane splitter overhead (a complex combination of hydrocarbons obtained from the distillation of the butane stream consisting of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_4$ )
  - **(e)** gases (petroleum), catalytic cracked gas oil depropanizer bottom, C<sub>4</sub>-rich acid-free (a complex combination of hydrocarbons obtained from the fractionation of catalytic cracked gas oil hydrocarbon stream and treated to remove hydrogen sulfide and

- other acidic components consisting of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_5$ , predominantly  $C_4$ )
- (f) gases (petroleum), catalytic cracked naphtha debutanizer bottom,  $C_3$ - $C_5$ -rich (a complex combination of hydrocarbons obtained from the stabilization of catalytic cracked naphtha consisting of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_5$ )
- (g) gases (petroleum), catalytic cracked naphtha depropanizer overhead,  $C_3$ -rich acid-free (a complex combination of hydrocarbons obtained from the fractionation of catalytic cracked hydrocarbons and treated to remove acidic impurities consisting of hydrocarbons having carbon numbers in the range of  $C_2$  through  $C_4$ , predominantly  $C_3$ )
- **(h)** gases (petroleum), catalytic cracker,  $C_1$ - $C_5$ -rich (a complex combination of hydrocarbons obtained from the distillation of products that result from a catalytic cracking process consisting of aliphatic hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_6$ , predominantly  $C_1$  through  $C_5$ )
- (i) gases (petroleum), catalytic polymerized naphtha stabilizer overhead,  $C_2$ - $C_4$ -rich (a complex combination of hydrocarbons obtained from the fractionation stabilization of catalytic polymerized naphtha consisting of aliphatic hydrocarbons having carbon numbers in the range of  $C_2$  through  $C_6$ , predominantly  $C_2$  through  $C_4$ )
- (j) gases (petroleum), catalytic reformed naphtha stripper overhead (a complex combination of hydrocarbons obtained from the stabilization of catalytic reformed naphtha consisting of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ )
- **(k)** gases (petroleum), deethanizer overhead (a complex combination of hydrocarbons obtained from the distillation of the

- gas and gasoline fractions that result from a catalytic cracking process consisting predominantly of ethane and ethene)
- (I) gases (petroleum), deisobutanizer tower overhead (a complex combination of hydrocarbons obtained from the atmospheric distillation of a butane-butene stream consisting of aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_4$ )
- (m) gases (petroleum), gas concentration reabsorber distillation (a complex combination of hydrocarbons obtained from the distillation of products from combined gas streams in a gas concentration reabsorber consisting predominantly of hydrogen, carbon monoxide, carbon dioxide, nitrogen, hydrogen sulfide and hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_3$ )
- (n) gases (petroleum), hydrogen-rich (a complex combination separated as a gas from hydrocarbon gases by chilling consisting predominantly of hydrogen with small amounts of carbon monoxide, nitrogen, methane and  $C_2$  hydrocarbons)
- (o) gases (petroleum), recycle, hydrogen-rich (a complex combination obtained from recycled reactor gases consisting predominantly of hydrogen with small amounts of carbon monoxide, carbon dioxide, nitrogen, hydrogen sulfide and saturated aliphatic hydrocarbons having carbon numbers in the range of  $C_1$  through  $C_5$ )
- (**p**) gases (petroleum), reformer make-up, hydrogen-rich (a complex combination obtained from the reformers consisting predominantly of hydrogen with small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )
- (q) gases (petroleum), thermal cracking distillation (a complex combination obtained from the distillation of products that result from a thermal cracking process consisting of hydrogen, hydrogen

- sulfide, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_6$ )
- (r) tail gas (petroleum), catalytic cracker refractionation absorber (a complex combination of hydrocarbons obtained from the refractionation of products that result from a catalytic cracking process consisting of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_3$ )
- (s) tail gas (petroleum), cracked distillate hydrotreater separator (a complex combination of hydrocarbons obtained by treating cracked distillates with hydrogen in the presence of a catalyst consisting of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )
- (t) tail gas (petroleum), saturate gas plant mixed stream,  $C_4$ -rich (a complex combination of hydrocarbons obtained from the fractionation stabilization of straight-run naphtha, distillation tail gas and catalytic reformed naphtha stabilizer tail gas consisting of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_6$ , predominantly butane and isobutane)
- (u) tail gas (petroleum), vacuum residue thermal cracker (a complex combination of hydrocarbons obtained from the thermal cracking of vacuum residues consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )
- (v) hydrocarbons,  $C_3$ - $C_4$ -rich, petroleum distillates (a complex combination of hydrocarbons obtained from the distillation and condensation of crude oil consisting of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_5$ , predominantly  $C_3$  and  $C_4$ )
- **(w)** gases (petroleum), hydrocracking depropanizer off, hydrocarbon-rich (a complex combination of hydrocarbons obtained from the distillation of products that result from a hydrocracking process consisting predominantly of hydrocarbons

- having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ )
- (x) gases (petroleum), light straight-run naphtha stabilizer off (a complex combination of hydrocarbons obtained from the stabilization of light straight-run naphtha consisting of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_2$  through  $C_6$ )
- **(y)** gases (petroleum), reformer effluent high-pressure flash drum off (a complex combination obtained from the high-pressure flashing of the effluent from the reforming reactor consisting predominantly of hydrogen with small amounts of methane, ethane and propane)
- (z) hydrocarbons,  $C_1$ - $C_4$  (a complex combination of hydrocarbons obtained from thermal cracking and absorber operations and from the distillation of crude oil consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$  and boiling in the range of approximately -164°C to -0.5°C)
- (**z.1**) hydrocarbons,  $C_1$ - $C_4$ , sweetened (a complex combination of hydrocarbons obtained by subjecting hydrocarbon gases to a sweetening process to convert mercaptans or to remove acidic impurities consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$  and boiling in the range of approximately -164°C to -0.5°C)
- (z.2) hydrocarbons,  $C_1$ - $C_3$  (a complex combination of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_3$  and boiling in the range of approximately -164°C to -42°C)
- (z.3) gases (petroleum),  $C_1$ - $C_5$ , wet (a complex combination of hydrocarbons obtained from the distillation of crude oil or the cracking of tower gas oil or both consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )

- (z.4) gases (petroleum), secondary absorber off, fluidized catalytic cracker overhead fractionater (a complex combination obtained from the fractionation of the overhead products that result from a catalytic cracking process in the fluidized catalytic cracker consisting of hydrogen, nitrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_3$ )
- (**z.5**) gases (petroleum), alkylation feed (a complex combination of hydrocarbons obtained from the catalytic cracking of gas oil consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_4$ )
- **(z.6)** petroleum products, refinery gases (a complex combination consisting predominantly of hydrogen with small amounts of methane, ethane and propane)
- (z.7) gases (petroleum), refinery (a complex combination obtained from various petroleum refining operations consisting of hydrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_3$ )
- (z.8) gases (petroleum), hydrotreated sour kerosine depentanizer stabilizer off (a complex combination obtained from the depentanizer stabilization of hydrotreated kerosine consisting predominantly of hydrogen, methane, ethane and propane with small amounts of nitrogen, hydrogen sulfide, carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of  $C_4$  through  $C_5$ )
- (z.9) gases (petroleum), crude oil fractionation off (a complex combination of hydrocarbons obtained from the fractionation of crude oil consisting of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ ) (z.10) gases (petroleum), fluidized catalytic cracker fractionation off
- (a complex combination obtained from the fractionation of the overhead products that result from a fluidized catalytic cracking

- process consisting of hydrogen, hydrogen sulfide, nitrogen and hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )
- (z.11) gases (petroleum), heavy distillate hydrotreater desulfurization stripper off (a complex combination stripped from the liquid product that results from a heavy distillate hydrotreater desulfurization process consisting of hydrogen, hydrogen sulfide and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )
- (z.12) gases (petroleum), preflash tower off, crude distillation (a complex combination produced from the first tower used in the distillation of crude oil consisting of nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_5$ )
- (z.13) gases (petroleum), straight-run stabilizer off (a complex combination of hydrocarbons obtained from the fractionation of the liquid produced from the first tower used in the distillation of crude oil consisting of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of  $C_1$  through  $C_4$ )
- **(z.14)** tail gas (petroleum), catalytic hydrodesulfurized naphtha separator (a complex combination of hydrocarbons obtained from the catalytic hydrodesulfurization of naphtha consisting of hydrogen, methane, ethane and propane)
- (**z.15**) gases (petroleum),  $C_3$ - $C_4$  (a complex combination of hydrocarbons obtained from the distillation of products that result from the cracking of crude oil consisting of hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_4$ , predominantly propane and propene, and boiling in the range of approximately -51°C to -1°C)
- **(z.16)** gases (petroleum),  $C_3$ - $C_4$ , isobutane-rich (a complex combination of hydrocarbons obtained from the distillation of

saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_6$ , predominantly butane and isobutane - consisting of saturated and unsaturated hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_4$ , predominantly isobutane)

- (z.17) gases (petroleum),  $C_4$ -rich (a complex combination of hydrocarbons obtained from the distillation of products that result from a catalytic fractionation process consisting of aliphatic hydrocarbons having carbon numbers in the range of  $C_3$  through  $C_5$ , predominantly  $C_4$ )
- (**z.18**) hydrocarbons,  $C_1$ - $C_4$ , debutanizer fraction (a complex combination of hydrocarbons obtained from a debutanizing process having carbon numbers in the range of  $C_1$  through  $C_4$ ) (**z.19**) petroleum gases, liquefied (a complex combination of hydrocarbons obtained from the distillation of crude oil consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_7$  and boiling in the range of approximately -40°C to 80°C) and
- (z.20) petroleum gases, liquefied, sweetened (a complex combination of hydrocarbons obtained by subjecting liquefied petroleum gases to a sweetening process to convert mercaptans or to remove acidic impurities consisting of hydrocarbons having carbon numbers predominantly in the range of  $C_3$  through  $C_7$  and boiling in the range of approximately -40°C to 80°C)
- 135. <u>Hexanedioic acid, bis(2-ethylhexyl) ester, which has the molecular formula  $C_{22}H_{42}O_4$ </u>
- 136. Reaction products of 2-propanone with diphenylamine
- 137. <u>2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, which has the molecular formula  $C_{22}H_{16}N_4O$ </u>
- 138. Fuel Oil No. 2

- 139. Natural gas condensates (a complex combination of hydrocarbons primarily in the carbon range of  $C_5$  to  $C_{15}$  that are condensed during production at a well head, in a natural gas processing plant, natural gas pipeline or straddle plant), including any of their liquid distillates that are primarily in the carbon range of  $C_5$  to  $C_{15}$
- 140. Phenol, 5-chloro-2-(2,4-dichlorophenoxy)-, which has the molecular formula  $C_{12}H_7Cl_3O_2$
- 141. Acetamide, N-[4-[(2-hydroxy-5-methylphenyl)azo]phenyl]-, which has the molecular formula  $C_{15}H_{15}N_3O_2$
- 142. Cobalt and soluble cobalt compounds
- 143. N,N'-mixed phenyl and tolyl derivatives of 1,4-benzenediamine
- 144. Benzene, 1-chloro-2-[2,2-dichloro-1-(4- chlorophenyl)ethyl]-, which has the molecular formula  $C_{14}H_{10}Cl_4$
- 146. Selenium and its compounds
- 147. Benzene, 1,1'-methylenebis[4-isocyanato-, which has the molecular formula  $C_{15}H_{10}N_2O_2$
- 148. Benzene, 1,1'-methylenebis[2-isocyanato-, which has the molecular formula  $C_{15}H_{10}N_2O_2$
- 149. Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-, which has the molecular formula  $C_{15}H_{10}N_2O_2$
- 150. Benzene, 1,1'-methylenebis[isocyanato- (non-isomeric-specific), which has the molecular formula  $C_{15}H_{10}N_2O_2$
- 151. Isocyanic acid, polymethylenepolyphenylene ester, which has the molecular formula  $C_{15}H_{10}N_2O_2 \cdot [C_8H_5NO]_n$  in which  $0 \le n \le 4$
- 163. Plastic manufactured items

## **Date modified:**

2021-06-21