

1. Acetic Acid

- Molecular Formula: $\text{C}_2\text{H}_4\text{O}_2$
- Molar Mass: 60.05 g/mol
- Boiling Point: 118.1 °C
- Melting Point: 16.6 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Corrosive to metals and skin
- Density: 1.049 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.4 (0.1 M solution)

2. Acetone

- Molecular Formula: $\text{C}_3\text{H}_6\text{O}$
- Molar Mass: 58.08 g/mol
- Boiling Point: 56 °C
- Melting Point: -95 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Not corrosive
- Density: 0.791 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

3. Acetylene

- Molecular Formula: C_2H_2
- Molar Mass: 26.04 g/mol
- Boiling Point: -84 °C
- Melting Point: -80.8 °C
- Water Solubility: Slightly soluble
- Biodegradability: Not readily biodegradable
- Flammability: Extremely flammable
- Corrosivity: Non-corrosive
- Density: 1.097 kg/m³ (gas)
- Radioactivity: Non-radioactive
- pH Value: Neutral (gas)

4. Acetylsalicylic Acid (Aspirin)

- Molecular Formula: $\text{C}_9\text{H}_8\text{O}_4$
- Molar Mass: 180.16 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 136 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable

- Corrosivity: Not corrosive
- Density: 1.40 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.5-3.5 (0.1 M solution)

5. Adenine

- Molecular Formula: C₅H₅N₅
- Molar Mass: 135.13 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 360 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.61 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 9-10 (0.1 M solution)

6. Adenosine Triphosphate (ATP)

- Molecular Formula: C₁₀H₁₆N₅O₁₃P₃
- Molar Mass: 507.18 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: Decomposes before melting
- Water Solubility: Soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: N/A (complex molecule)
- Radioactivity: Non-radioactive
- pH Value: 6.5-7.5 (solution)

7. Adipic Acid

- Molecular Formula: C₆H₁₀O₄
- Molar Mass: 146.14 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 152 °C
- Water Solubility: 1.5 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.36 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.0-2.5 (0.1 M solution)

8. Aluminum(III) Oxide (Al₂O₃)

- Molecular Formula: Al₂O₃
- Molar Mass: 101.96 g/mol
- Boiling Point: 2,977 °C
- Melting Point: 2,072 °C

- Water Solubility: Insoluble
- Biodegradability: Non-biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 3.95-4.1 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

9. Ammonia

- Molecular Formula: NH₃
- Molar Mass: 17.03 g/mol
- Boiling Point: -33.34 °C
- Melting Point: -77.73 °C
- Water Solubility: Highly soluble (482 g/L at 20 °C)
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Corrosive
- Density: 0.73 g/cm³ (gas)
- Radioactivity: Non-radioactive
- pH Value: 11.6 (1 M solution)

10. Ascorbic Acid (Vitamin C)

- Molecular Formula: C₆H₈O₆
- Molar Mass: 176.12 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 190-192 °C
- Water Solubility: 330 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.65 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.1-2.6 (5% solution)

11. Aspartame

- Molecular Formula: C₁₄H₁₈N₂O₅
- Molar Mass: 294.31 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 246-247 °C
- Water Solubility: 10 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.347 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 4.5-6 (0.8% solution)

12. Benzene

- Molecular Formula: C₆H₆

- Molar Mass: 78.11 g/mol
- Boiling Point: 80.1 °C
- Melting Point: 5.5 °C
- Water Solubility: 1.79 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Not corrosive
- Density: 0.876 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

13. Benzoic Acid

- Molecular Formula: C₇H₆O₂
- Molar Mass: 122.12 g/mol
- Boiling Point: 249 °C
- Melting Point: 122 °C
- Water Solubility: 3.4 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Not corrosive
- Density: 1.27 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.8 (saturated solution)

14. Biphenyl and PCBs (Polychlorinated Biphenyls)

- Molecular Formula (Biphenyl): C₁₂H₁₀
- Molar Mass (Biphenyl): 154.21 g/mol
- Boiling Point (Biphenyl): 255 °C
- Melting Point (Biphenyl): 69 °C
- Water Solubility (Biphenyl): 6.94 mg/L at 25 °C
- Biodegradability: PCBs are not readily biodegradable; biphenyl is biodegradable
- Flammability: Flammable
- Corrosivity: Not corrosive
- Density (Biphenyl): 1.04 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (biphenyl)

15. Butane

- Molecular Formula: C₄H₁₀
- Molar Mass: 58.12 g/mol
- Boiling Point: -1 °C
- Melting Point: -138 °C
- Water Solubility: 61 mg/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.579 g/L (gas)
- Radioactivity: Non-radioactive

- pH Value: Neutral (does not dissociate in water)

16. Butene

- Molecular Formula: C_4H_8
- Molar Mass: 56.11 g/mol
- Boiling Point: -6.3 °C
- Melting Point: -185 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.62 g/L (gas)
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

17. Butyric Acid and Fatty Acids

- Molecular Formula (Butyric Acid): $C_4H_8O_2$
- Molar Mass (Butyric Acid): 88.11 g/mol
- Boiling Point (Butyric Acid): 163.5 °C
- Melting Point (Butyric Acid): -5 °C
- Water Solubility (Butyric Acid): Miscible
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Corrosive to metals and skin
- Density (Butyric Acid): 0.96 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 3.8 (0.1 M solution)

18. Caffeine

- Molecular Formula: $C_8H_{10}N_4O_2$
- Molar Mass: 194.19 g/mol
- Boiling Point: Sublimes at 178 °C
- Melting Point: 238 °C
- Water Solubility: 2.17 g/100 mL at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.23 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 6.9 (1% solution)

19. Calcium Carbonate

- Molecular Formula: $CaCO_3$
- Molar Mass: 100.09 g/mol
- Boiling Point: Decomposes at 1,339 °C
- Melting Point: 825°C
- Water Solubility: 0.013 g/L at 25 °C
- Biodegradability: Non-biodegradable
- Flammability: Non-flammable

- Corrosivity: Not corrosive
- Density: 2.71 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 9.91 (saturated solution)

20. Calcium Oxide (Lime)

- Molecular Formula: CaO
- Molar Mass: 56.08 g/mol
- Boiling Point: 2,850 °C
- Melting Point: 2,613 °C
- Water Solubility: 1.73 g/L at 20 °C
- Biodegradability: Non-biodegradable
- Flammability: Non-flammable
- Corrosivity: Corrosive
- Density: 3.34 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 12.4 (saturated solution)

21. Calcium Sulfate (Gypsum)

- Molecular Formula: CaSO₄
- Molar Mass: 136.14 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 1,450 °C
- Water Solubility: 0.209 g/100 mL at 25 °C
- Biodegradability: Non-biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 2.32 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 7.7 (saturated solution)

22. Carbon Dioxide

- Molecular Formula: CO₂
- Molar Mass: 44.01 g/mol
- Boiling Point: Sublimes at -78.5 °C
- Melting Point: Sublimes at -78.5 °C (solid phase directly to gas)
- Water Solubility: 1.45 g/L at 25 °C
- Biodegradability: N/A (natural part of carbon cycle)
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.98 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: 3.7 (saturated solution, carbonic acid)

23. Carbon Monoxide

- Molecular Formula: CO
- Molar Mass: 28.01 g/mol
- Boiling Point: -191.5 °C
- Melting Point: -205.1 °C
- Water Solubility: 2.3 g/L at 25 °C
- Biodegradability: N/A (oxidizes to CO₂)
- Flammability: Highly flammable
- Corrosivity: Not corrosive
- Density: 1.25 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

24. Chloroform

- Molecular Formula: CHCl₃
- Molar Mass: 119.38 g/mol
- Boiling Point: 61.2 °C
- Melting Point: -63.5 °C
- Water Solubility: 8.09 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.489 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

25. Chlorophyll

- Molecular Formula: C₅₅H₇₂MgN₄O₅ (Chlorophyll a)
- Molar Mass: 893.49 g/mol (Chlorophyll a)
- Boiling Point: Decomposes before boiling
- Melting Point: Decomposes before melting
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: N/A (complex molecule)
- Radioactivity: Non-radioactive
- pH Value: N/A (depends on solution and form)

26. Cholesterol

- Molecular Formula: C₂₇H₄₆O
- Molar Mass: 386.65 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 148-150 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive

- Density: 1.067 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (pure form)

27. Citric Acid

- Molecular Formula: C₆H₈O₇
- Molar Mass: 192.12 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 153 °C
- Water Solubility: 59.2 g/100 mL at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Slightly corrosive
- Density: 1.66 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.2 (5% solution)

28. Cocaine

- Molecular Formula: C₁₇H₂₁NO₄
- Molar Mass: 303.35 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 98 °C
- Water Solubility: 1.8 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.22 g/cm³
- Radioactivity: Non-radioactive
- pH Value: N/A (depends on form)

29. Cytosine, Thymine, and Uracil

- Cytosine
 - Molecular Formula: C₄H₅N₃O
 - Molar Mass: 111.10 g/mol
 - Boiling Point: Decomposes before boiling
 - Melting Point: 320-325 °C
 - Water Solubility: Soluble
 - Biodegradability: Readily biodegradable
 - Flammability: Non-flammable
 - Corrosivity: Not corrosive
 - Density: 1.32 g/cm³
 - Radioactivity: Non-radioactive
 - pH Value: 6-7 (depends on solution)
- Thymine
 - Molecular Formula: C₅H₈N₂O₂
 - Molar Mass: 126.11 g/mol
 - Boiling Point: Decomposes before boiling
 - Melting Point: 316-317 °C

- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.23 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 6-7 (depends on solution)
- Uracil
 - Molecular Formula: C₄H₄N₂O₂
 - Molar Mass: 112.09 g/mol
 - Boiling Point: Decomposes before boiling
 - Melting Point: 335 °C
 - Water Solubility: Soluble
 - Biodegradability: Readily biodegradable
 - Flammability: Non-flammable
 - Corrosivity: Not corrosive
 - Density: 1.32 g/cm³
 - Radioactivity: Non-radioactive
 - pH Value: 6-7 (depends on solution)

30. DDT (Dichlorodiphenyltrichloroethane)

- Molecular Formula: C₁₄H₉Cl₅
- Molar Mass: 354.49 g/mol
- Boiling Point: 260 °C
- Melting Point: 108.5 °C
- Water Solubility: 0.025 mg/L at 25 °C
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.68 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

31. DEET (N,N-Diethyl-meta-toluamide)

- Molecular Formula: C₁₂H₁₇NO
- Molar Mass: 191.27 g/mol
- Boiling Point: 288 °C
- Melting Point: -45 °C
- Water Solubility: 0.86 g/L at 25 °C
- Biodegradability: Not readily biodegradable
- Flammability: Flammable

32. Dichlorodifluoromethane (CFC-12)

- Molecular Formula: CCl₂F₂
- Molar Mass: 120.91 g/mol
- Boiling Point: -29.8 °C
- Melting Point: -158 °C
- Water Solubility: 0.22 g/L at 25 °C

- Biodegradability: Non-biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.486 g/cm³ (at 25 °C)
- Radioactivity: Non-radioactive
- pH Value: Neutral

33. Dopamine

- Molecular Formula: C₈H₁₁NO₂
- Molar Mass: 153.18 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 128-130 °C
- Water Solubility: 60 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.26 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 5-6 (depends on solution)

34. Epinephrine (Adrenaline)

- Molecular Formula: C₉H₁₃NO₃
- Molar Mass: 183.20 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 211-212 °C
- Water Solubility: Soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.28 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.5-3.5 (0.1% solution)

35. Ethane

- Molecular Formula: C₂H₆
- Molar Mass: 30.07 g/mol
- Boiling Point: -88.6 °C
- Melting Point: -182.8 °C
- Water Solubility: 60 mg/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 1.356 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

36. Ethene (Ethylene)

- Molecular Formula: C₂H₄
- Molar Mass: 28.05 g/mol

- Boiling Point: -103.7 °C
- Melting Point: -169.2 °C
- Water Solubility: 131 mg/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 1.178 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

37. Ether

- Molecular Formula: C₄H₁₀O (Diethyl ether)
- Molar Mass: 74.12 g/mol
- Boiling Point: 34.6 °C
- Melting Point: -116.3 °C
- Water Solubility: 6.9 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.7134 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

38. Ethyl Alcohol (Ethanol)

- Molecular Formula: C₂H₅OH
- Molar Mass: 46.07 g/mol
- Boiling Point: 78.37 °C
- Melting Point: -114.1 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.789 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

39. Ethylenediaminetetraacetic Acid (EDTA)

- Molecular Formula: C₁₀H₁₆N₂O₈
- Molar Mass: 292.24 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 250 °C
- Water Solubility: 0.05 g/L at 25 °C
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 0.86 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.5 (0.1 M solution)

40. Fluoxetine (Prozac)

- Molecular Formula: $C_{17}H_{18}F_3NO$
- Molar Mass: 309.33 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 179-182 °C
- Water Solubility: 14 mg/L at 25 °C
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.28 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (depends on form and solution)

41. Formaldehyde

- Molecular Formula: CH_2O
- Molar Mass: 30.03 g/mol
- Boiling Point: -19 °C (gas)
- Melting Point: -92 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Corrosive
- Density: 0.815 g/cm³ (liquid)
- Radioactivity: Non-radioactive
- pH Value: 2.8-4 (aqueous solution)

42. Formic Acid

- Molecular Formula: CH_2O_2
- Molar Mass: 46.03 g/mol
- Boiling Point: 100.8 °C
- Melting Point: 8.4 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Corrosive
- Density: 1.22 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 2.4 (1% solution)

43. Glucose

- Molecular Formula: $C_6H_{12}O_6$
- Molar Mass: 180.16 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 146 °C
- Water Solubility: 909 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive

- Density: 1.54 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 6-7 (neutral in solution)

44. Glycerol (Glycerin)

- Molecular Formula: C₃H₈O₃
- Molar Mass: 92.09 g/mol
- Boiling Point: 290 °C
- Melting Point: 17.8 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.261 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 5.5-7.5 (depends on solution)

45. Guanine

- Molecular Formula: C₅H₅N₅O
- Molar Mass: 151.13 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 350 °C (decomposes)
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 2.2 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 7 (neutral in solution)

46. Hydrochloric Acid

- Molecular Formula: HCl
- Molar Mass: 36.46 g/mol
- Boiling Point: -85.05 °C (gas)
- Melting Point: -114.2 °C (gas)
- Water Solubility: Miscible
- Biodegradability: N/A (dissociates in water)
- Flammability: Non-flammable
- Corrosivity: Highly corrosive
- Density: 1.18 g/cm³ (concentrated solution)
- Radioactivity: Non-radioactive
- pH Value: <1 (concentrated solution)

47. Hydrogen Peroxide

- Molecular Formula: H₂O₂
- Molar Mass: 34.01 g/mol
- Boiling Point: 150.2 °C
- Melting Point: -0.43 °C
- Water Solubility: Miscible

- Biodegradability: Readily biodegradable
- Flammability: Non-flammable (but strong oxidizer)
- Corrosivity: Corrosive
- Density: 1.45 g/cm³ (concentrated solution)
- Radioactivity: Non-radioactive
- pH Value: 4.5 (30% solution)

48. Hydrogen Sulfide

- Molecular Formula: H₂S
- Molar Mass: 34.08 g/mol
- Boiling Point: -60.2 °C
- Melting Point: -82 °C
- Water Solubility: 4 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Corrosive
- Density: 1.539 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: 4-5 (weak acid)

49. Ibuprofen

- Molecular Formula: C₁₃H₁₈O₂
- Molar Mass: 206.29 g/mol
- Boiling Point: 157 °C (at 4 mmHg)
- Melting Point: 75-78 °C
- Water Solubility: 0.021 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.18 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 4-5 (in solution)

50. Indigo

- Molecular Formula: C₁₆H₁₀N₂O₂
- Molar Mass: 262.27 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 390-392 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.4 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

51. Insulin

- Molecular Formula: C₂₅₇H₃₈₃N₆₅O₇₇S₆
- Molar Mass: ~5,808 Da (varies by species)

- Boiling Point: Decomposes before boiling
- Melting Point: Decomposes before melting
- Water Solubility: Soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: N/A (complex protein)
- Radioactivity: Non-radioactive
- pH Value: 2.8-3.5 (in solution)

52. Iron(III) Oxide

- Molecular Formula: Fe_2O_3
- Molar Mass: 159.69 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 1,565 °C
- Water Solubility: Insoluble
- Biodegradability: Non-biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 5.24 g/cm³
- Radioactivity: Non-radioactive
- pH Value: N/A (insoluble in water)

53. Isooctane

- Molecular Formula: C_8H_{18}
- Molar Mass: 114.23 g/mol
- Boiling Point: 99.3 °C
- Melting Point: -107.38 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.692 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

54. Isoprene

- Molecular Formula: C_5H_8
- Molar Mass: 68.12 g/mol
- Boiling Point: 34 °C
- Melting Point: -145.95 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.681 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

55. Methane

- Molecular Formula: CH₄
- Molar Mass: 16.04 g/mol
- Boiling Point: -161.5 °C
- Melting Point: -182.5 °C
- Water Solubility: 22.7 mg/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.717 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

56. Methyl Alcohol (Methanol)

- Molecular Formula: CH₃OH
- Molar Mass: 32.04 g/mol
- Boiling Point: 64.7 °C
- Melting Point: -97.6 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.791 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

57. Methylphenidate (Ritalin)

- Molecular Formula: C₁₄H₁₉NO₂
- Molar Mass: 233.31 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 224-226 °C
- Water Solubility: 7.6 mg/mL at 25 °C
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: 1.13 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

58. Monosodium Glutamate (MSG)

- Molecular Formula: C₅H₈NNaO₄
- Molar Mass: 169.11 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 232 °C
- Water Solubility: 740 g/L at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive

- Density: 1.62 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 6.7-7.2 (neutral in solution)

59. Naphthalene

- Molecular Formula: C₁₀H₈
- Molar Mass: 128.17 g/mol
- Boiling Point: 218 °C
- Melting Point: 80.26 °C
- Water Solubility: 31.7 mg/L at 25 °C
- Biodegradability: Not readily biodegradable
- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 1.14 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

60. Nicotine

- Molecular Formula: C₁₀H₁₄N₂
- Molar Mass: 162.23 g/mol
- Boiling Point: 247 °C
- Melting Point: -79 °C
- Water Solubility: 1 g/100 mL at 25 °C
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 1.01 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 10.2 (in solution)

61. Nitric Acid

- Molecular Formula: HNO₃
- Molar Mass: 63.01 g/mol
- Boiling Point: 83 °C
- Melting Point: -42 °C
- Water Solubility: Miscible
- Biodegradability: N/A (dissociates in water)
- Flammability: Non-flammable
- Corrosivity: Highly corrosive
- Density: 1.51 g/cm³ (concentrated solution)
- Radioactivity: Non-radioactive
- pH Value: <1 (concentrated solution)

62. Nitric Oxide

- Molecular Formula: NO
- Molar Mass: 30.01 g/mol
- Boiling Point: -152 °C
- Melting Point: -164 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.3402 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: N/A (gas)

63. Nitrogen Dioxide

- Molecular Formula: NO₂
- Molar Mass: 46.01 g/mol
- Boiling Point: 21 °C
- Melting Point: -11.2 °C
- Water Solubility: 0.01 g/mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Corrosive
- Density: 1.88 g/L (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: 3.4-3.6 (in water)

64. Nitrous Oxide

- Molecular Formula: N₂O
- Molar Mass: 44.01 g/mol
- Boiling Point: -88.48 °C
- Melting Point: -90.81 °C
- Water Solubility: 0.122 g/100 mL at 20 °C
- Biodegradability: N/A (gas in atmosphere)
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.977 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

65. Nitroglycerin

- Molecular Formula: C₃H₅N₃O₉
- Molar Mass: 227.09 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 13.5 °C
- Water Solubility: 1.35 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive

- Density: 1.6 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

66. Norethindrone

- Molecular Formula: C₂₀H₂₆O₂
- Molar Mass: 298.42 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 203-204 °C
- Water Solubility: Practically insoluble
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.13 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

67. Penicillin

- Molecular Formula: C₁₆H₁₈N₂O₄S
- Molar Mass: 334.39 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 214 °C
- Water Solubility: Soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.28 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

68. Phenol

- Molecular Formula: C₆H₆O
- Molar Mass: 94.11 g/mol
- Boiling Point: 181.7 °C
- Melting Point: 40.5 °C
- Water Solubility: 8.3 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Corrosive
- Density: 1.07 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 5.4 (0.1M solution)

69. Phosphoric Acid

- Molecular Formula: H₃PO₄
- Molar Mass: 98 g/mol
- Boiling Point: 158 °C
- Melting Point: 42.35 °C
- Water Solubility: Miscible

- Biodegradability: N/A (dissociates in water)
- Flammability: Non-flammable
- Corrosivity: Highly corrosive
- Density: 1.88 g/cm³ (85% solution)
- Radioactivity: Non-radioactive
- pH Value: <1 (concentrated solution)

70. Piperine

- Molecular Formula: C₁₇H₁₉NO₃
- Molar Mass: 285.34 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 128-130 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.193 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

71. Potassium Carbonate

- Molecular Formula: K₂CO₃
- Molar Mass: 138.21 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 891 °C
- Water Solubility: 1100 g/L at 20 °C
- Biodegradability: N/A (inorganic salt)
- Flammability: Non-flammable
- Corrosivity: Corrosive
- Density: 2.43 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 11.5 (5% solution)

72. Potassium Nitrate

- Molecular Formula: KNO₃
- Molar Mass: 101.1 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 334 °C
- Water Solubility: 316 g/L at 20 °C
- Biodegradability: N/A (inorganic salt)
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 2.11 g/cm³
- Radioactivity: Non-radioactive
- pH Value: 7 (neutral)

73. Propane

- Molecular Formula: C₃H₈
- Molar Mass: 44.1 g/mol

- Boiling Point: -42.1 °C
- Melting Point: -188 °C
- Water Solubility: 0.01 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 2.0098 kg/m³ (gas at STP)
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

75. Propylene

- Molecular Formula: C₃H₆
- Molar Mass: 42.08 g/mol
- Boiling Point: -47.6 °C
- Melting Point: -185.2 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable
- Flammability: Highly flammable
- Corrosivity: Non-corrosive
- Density: 0.493 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (does not dissociate in water)

76. Quinine

- Molecular Formula: C₂₀H₂₄N₂O₂
- Molar Mass: 324.42 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 177-179 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.18 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Basic (alkaline)

77. Saccharin

- Molecular Formula: C₇H₅NO₃S
- Molar Mass: 183.18 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 228-229 °C
- Water Solubility: 1.2 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: ~1.8 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

78. Silicon Dioxide (Silica)

- Molecular Formula: SiO_2
- Molar Mass: 60.08 g/mol
- Boiling Point: 2,950 °C
- Melting Point: 1,713 °C
- Water Solubility: Insoluble
- Biodegradability: Non-biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 2.65 g/cm³
- Radioactivity: Non-radioactive
- pH Value: ~7 (neutral)

79. Sodium Bicarbonate

- Molecular Formula: NaHCO_3
- Molar Mass: 84.01 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 50 °C
- Water Solubility: 9 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 2.20 g/cm³
- Radioactivity: Non-radioactive
- pH Value: ~8.3 (alkaline)

80. Sodium Carbonate

- Molecular Formula: Na_2CO_3
- Molar Mass: 105.99 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 851 °C
- Water Solubility: 22 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 2.54 g/cm³
- Radioactivity: Non-radioactive
- pH Value: ~11.6 (alkaline)

81. Sodium Chloride

- Molecular Formula: NaCl
- Molar Mass: 58.44 g/mol
- Boiling Point: 1,413 °C
- Melting Point: 801 °C
- Water Solubility: 360 g/L at 20 °C
- Biodegradability: N/A (inorganic salt)
- Flammability: Non-flammable
- Corrosivity: Non-corrosive

- Density: 2.165 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

82. Sodium Hydroxide

- Molecular Formula: NaOH
- Molar Mass: 40.00 g/mol
- Boiling Point: 1,388 °C
- Melting Point: 318 °C
- Water Solubility: Miscible
- Biodegradability: N/A (dissociates in water)
- Flammability: Non-flammable
- Corrosivity: Highly corrosive
- Density: 2.13 g/cm³ (50% solution)
- Radioactivity: Non-radioactive
- pH Value: 14 (concentrated solution)

83. Sodium Hypochlorite

- Molecular Formula: NaClO
- Molar Mass: 74.44 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: -18 °C
- Water Solubility: Miscible
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Corrosive
- Density: 1.11 g/cm³ (12.5% solution)
- Radioactivity: Non-radioactive
- pH Value: 11-13 (solution)

84. Strychnine

- Molecular Formula: C₂₁H₂₂N₂O₂
- Molar Mass: 334.42 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 268-274 °C
- Water Solubility: Slightly soluble
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Not corrosive
- Density: ~1.3 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

85. Styrene

- Molecular Formula: C_8H_8
- Molar Mass: 104.15 g/mol
- Boiling Point: 145 °C
- Melting Point: -30 °C
- Water Solubility: ~0.03 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 0.909 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

86. Sucrose

- Molecular Formula: $C_{12}H_{22}O_{11}$
- Molar Mass: 342.30 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 186 °C
- Water Solubility: 2,000 g/L at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.587 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

87. Sulfuric Acid

- Molecular Formula: H_2SO_4
- Molar Mass: 98.08 g/mol
- Boiling Point: 337 °C
- Melting Point: 10 °C
- Water Solubility: Miscible
- Biodegradability: N/A (dissociates in water)
- Flammability: Non-flammable
- Corrosivity: Highly corrosive
- Density: 1.84 g/cm³ (96% solution)
- Radioactivity: Non-radioactive
- pH Value: <1 (concentrated solution)

88. Tetrafluoroethylene

- Molecular Formula: C_2F_4
- Molar Mass: 100.02 g/mol
- Boiling Point: -76.3 °C
- Melting Point: -142 °C
- Water Solubility: Insoluble
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.447 g/cm³

- Radioactivity: Non-radioactive
- pH Value: Neutral (gas)

89. Tetrahydrocannabinol (THC)

- Molecular Formula: $C_{21}H_{30}O_2$
- Molar Mass: 314.46 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 157 °C
- Water Solubility: Insoluble
- Biodegradability: Not readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: $\sim 1.0 \text{ g/cm}^3$
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

90. Thymine

- Molecular Formula: $C_5H_8N_2O_2$
- Molar Mass: 126.11 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 316-317 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: $\sim 1.5 \text{ g/cm}^3$
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

91. Trinitrotoluene (TNT)

- Molecular Formula: $C_7H_5N_3O_6$
- Molar Mass: 227.13 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 81 °C
- Water Solubility: Insoluble
- Biodegradability: Not readily biodegradable
- Flammability: Explosive
- Corrosivity: Non-corrosive
- Density: 1.654 g/cm^3
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

92. Toluene

- Molecular Formula: C_7H_8
- Molar Mass: 92.14 g/mol
- Boiling Point: 110.6 °C
- Melting Point: -93 °C
- Water Solubility: 0.52 g/L at 20 °C
- Biodegradability: Readily biodegradable

- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 0.866 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

93. Triuranium Octaoxide

- Molecular Formula: U₃O₈
- Molar Mass: 842.02 g/mol
- Boiling Point: N/A (decomposes)
- Melting Point: 2,075 °C
- Water Solubility: Insoluble
- Biodegradability: Not biodegradable
- Flammability: Non-flammable
- Corrosivity: Corrosive to some metals
- Density: 8.32 g/cm³
- Radioactivity: Naturally radioactive
- pH Value: N/A (solid)

94. Uracil

- Molecular Formula: C₄H₄N₂O₂
- Molar Mass: 112.09 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 335-338 °C
- Water Solubility: Slightly soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: ~1.5 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 0.866 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

95. Urea

- Molecular Formula: CH₄N₂O
- Molar Mass: 60.06 g/mol
- Boiling Point: Decomposes before boiling
- Melting Point: 133-135 °C
- Water Solubility: Soluble
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.32 g/cm³

- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

96. Vanillin

- Molecular Formula: $C_8H_8O_3$
- Molar Mass: 152.15 g/mol
- Boiling Point: 285 °C
- Melting Point: 81-83 °C
- Water Solubility: ~2 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1.06 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

97. Vinyl Chloride

- Molecular Formula: C_2H_3Cl
- Molar Mass: 62.50 g/mol
- Boiling Point: -13.4 °C
- Melting Point: -153.7 °C
- Water Solubility: 0.25 g/100 mL at 20 °C
- Biodegradability: Readily biodegradable
- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 0.911 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

98. Water

- Molecular Formula: H_2O
- Molar Mass: 18.02 g/mol
- Boiling Point: 100 °C
- Melting Point: 0 °C
- Water Solubility: Soluble
- Biodegradability: N/A (does not biodegrade)
- Flammability: Non-flammable
- Corrosivity: Non-corrosive
- Density: 1 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)

99. Xylene

- Molecular Formula: C_8H_{10}
- Molar Mass: 106.16 g/mol
- Boiling Point: 138-144 °C
- Melting Point: -47.87 °C
- Water Solubility: Insoluble
- Biodegradability: Readily biodegradable

- Flammability: Flammable
- Corrosivity: Non-corrosive
- Density: 0.86 g/cm³
- Radioactivity: Non-radioactive
- pH Value: Neutral (7)