

Organic Constituents

Student Worksheet

Bacteria

(Constituent + O₂ → CO₂ + H₂O)

Substituting the chemical formula for common household constituents, the equation may be balanced to show complete reactions. Some examples of common household constituents of wastewater are listed below. Common household constituents and their formulas are below.

1. Acetic Acid (vinegar) CH₃COOH
2. Acetone (nail polish remover) CH₃COCH₃
3. Citric Acid (orange juice) C₆H₈O₇
4. Sucrose (sugar) C₁₂H₂₂O₁₁
5. Benzene (a component of gasoline) C₆H₆
6. Phenol (present in mouthwash) C₆H₅OH
7. Naphthalene (mothballs) C₁₀H₈
8. Uric Acid C₅H₄N₄O₃
9. Caffeine C₈H₁₀N₄O₂
10. Acetylsalicylic Acid (aspirin) CH₃COOC₆H₄COOH
11. Vitamin A C₂₀H₃₀O
12. Thiamine (Vitamin B₁) C₁₂H₁₇N₄SOCl
13. Ascorbic Acid (Vitamin C) C₆H₈O₆
14. Vitamin D₂ C₂₈H₄₄O
15. Tocopherol (Vitamin E) C₂₉H₅₀O₂
16. Riboflavin (Vitamin B₂) C₁₇H₂₀N₄O₆
17. Alanine (a constituent of most proteins) C₃H₇NH₂O₂H
18. Stearic Acid (soap) C₁₇H₃₅COOH
19. Ethanol (the alcohol contained in beer, wine, etc.) C₂H₅OH
20. Starch (C₆H₁₀O₅)_n where n = a whole number