

Table 1.3. Properties of common compounds and mixtures and of their constituent elements

Substance	Matter Category	Description
Copper Sulfate		
Copper (Cu)		Reddish-orange soft metal
Sulfur (S)		Bright yellow solid
Copper Sulfate (CuSO ₄)		Bright blue crystalline salt
Copper Sulfate dissolved in Water (CuSO ₄ in H ₂ O)		Blue liquid
Sodium Chloride		
Sodium (Na)		Soft, silvery-white metal
Chlorine (Cl ₂)		Pale, yellow-green gas
Sodium Chloride (NaCl)		White crystalline solid (table salt)
Salt Water (NaCl in H ₂ O)		Colorless liquid
Salt and Pepper (NaCl and pepper, which includes piperine, C ₁₇ H ₁₉ NO ₃ , pinene, sabinene, limonene, linalool, and more)		White crystalline solid and crushed shards of brown and black
Glucose		
Carbon (C)		Brittle black solid (coal) OR soft gray solid (graphite) OR transparent hard solid (diamond)
Hydrogen (H ₂)		Colorless, odorless gas
Oxygen (O ₂)		Colorless, odorless gas
Glucose (C ₆ H ₁₂ O ₆)		White crystalline solid
Corn Syrup (C ₆ H ₁₂ O ₆ , H ₂ O, NaCl, and vanilla, which contains vanillin, C ₈ H ₈ O ₃ , piperonal, and several hundred other compounds)		Thick, clear liquid