Synthetic Nutrient Glossary

A

Acetate Retinol - USP Vitamin A; prepared by reacting retinol with acetic acid; synthetic and not found in any food.

Ascorbic Acid - USP Vitamin C; prepared by isolating the substance from plant materials; synthesized and not found in any food in this form.

B

Boron Gluconate - USP Boron; prepared by reacting elemental boron with gluconic acid; synthetic and not found in any food.

C

Calcium Citrate - USP Calcium; prepared by reacting calcium carbonate (limestone) with citric acid; synthetic and not found in any food.

Calcium d-Pantothenate - USP Pantothenic Acid; mixture of calcium carbonate (limestone) and pantothenic acid; synthetic and not found in food.

Calcium Threonate - USP Calcium; prepared by reacting calcium carbonate (limestone) with threonine; synthetic and not found in any food.

Cholecalciferol - USP Vitamin D-3; prepared by isolating the substance as found in animal tissues, such as sheep's wool; synthetic and not found in any food in this form.

Choline Bitartate - USP Choline; prepared by reacting choline with tartaric acid; synthetic and not found in any food.

Chromium Chloride - USP Chromium; prepared by reacting elemental chromium with hydrochloric acid; synthetic and not found in any food.

Chromium Picolinate - USP Chromium; prepared by reacting elemental chromium with picolinic acid; synthetic and not found in any food.

Cobalamin - A compound containing nucleotides that are characteristic of Vitamin B-12, but lack a ligand at the 6 position of the cobalt.

Copper/Cupric Gluconate - USP Copper; prepared by reacting elemental copper with gluconic acid; synthetic and not found in any food.

Copper/Cupric Sulfate - USP Copper; prepared by reacting elemental copper with sulfuric acid; synthetic and not found in any food.

Copper/Cupric Oxide - USP Copper; oxidized/rusted copper; not found in any food.

Cyanocobalamin - USP Vitamin B-12; a derivative of cobalamin and only the isolated of Vitamin B-12; synthesized and not found in any food.

D

D-Alpha (or Beta, Delta, Gamma)-Tocopherol Acetate - USP Vitamin E; prepared by reacting d-tocopherol isomers with acetic acid; synthesized and not found in any food.

D-Alpha (or Beta, Delta, Gamma)-Tocopherol Succinate - USP Vitamin E; prepared by reacting d-tocopherol isomers with succinic acid; synthesized and not in any food.

D-Calcium Pantothenate - USP Pantothenic Acid; mixture of calcium carbonate (limestone) and pantothenic acid; synthetic and not found in food.

Dicalcium Phosphate - USP Calcium/USP Phosphorous; chalk; combination of calcium and phosphorous;

not found in food in this form. Sometimes used as a tableting excipient, but is not a true source of calcium or phosphorous.

E

Ergocalciferol - USP Vitamin D-2; prepared by irradiating ergosterol or by isolating it from fungi or fish oil; synthesized and not found in food in this form.

F

Ferrous Fumerate - USP Iron; prepared by reacting elemental iron with fumeric acid; synthetic and not found in any food.

Ferrous Gluconate - USP Iron; prepared by reacting elemental iron with gluconic acid; synthetic and not found in any food.

L

L-Selenomethionine - USP Selenium; synthetic version of selenomethionine; see selenomethionine.

M

Magnesium Aspartate - USP Magnesium; prepared by reacting elemental magnesium with aspartic acid; synthetic and not found in any food.

Magnesium Citrate - USP Magnesium; prepared by reacting elemental magnesium with citric acid; synthetic and not found in any food.

Magnesium Gluconate - USP Magnesium; prepared by reacting elemental magnesium with gluconic acid; synthetic and not found in any food.

Magnesium Lactate Gluconate - USP Magnesium; prepared by reacting elemental magnesium with gluconic and lactic acid; synthetic and not found in any food.

Magnesium Oxide - USP Magnesium; oxidized/rusted magnesium; not found in any food.

Magnesium Stearate - Prepared by reacting elemental magnesium with stearic acid; not a source of magnesium, but used as a tableting excipient.

Manganese Sulfate - USP Manganese; prepared by reacting elemental manganese with sulfuric acid; synthetic and not found in any food.

N

Nickel Sulfate - USP Nickel; prepared by reacting elemental nickel with sulfuric acid; synthetic and not found in any food.

P

Palmitate Retinol - USP Vitamin A; prepared by reacting retinol with palmitic acid; synthetic and not found in any food.

Potassium Chloride - USP Potassium; prepared by reacting elemental potassium with hydrochloric acid; synthetic and not found in any food.

Potassium Citrate - USP Potassium; prepared by reacting elemental potassium with citric acid; synthetic and not found in any food.

Potassium Iodide - USP Iodine; prepared by reacting elemental potassium with iodine; synthetic and not found in any food.

Pyridoxine - One of the forms of Vitamin B-6; not found by itself in foods.

Pyridoxine Hydrochloride (HCl) - USP Vitamin B-6; prepared by reacting pyridoxine with hydrochloric acid to create a salt; synthetic and not found in any food.

R

Retinol - USP Vitamin A; prepared by extracting it from animal materials, such as sheep wool and reacting it with chemicals; synthesized and not found in any food in this form.

S

Selenomethionine - An amino acid formed when selenium replaces the sulfur in methionine.

Sodium Borate - USP Boron; prepared by reacting elemental sodium with boric acid; synthetic and not found in any food.

Sodium Metavanadate - USP Vanadium; prepared by reacting elemental sodium with metavanadic acid; synthetic and not found in any food.

Sodium Molybdate - USP Molybdenum; prepared by reacting elemental sodium with molybdic acid; synthetic and not found in any food.

Sodium Selenate - USP Selenium; prepared by reacting elemental sodium with selenic acid; synthetic and not found in any food.

Stannous Chloride - USP Tin; Prepared by reacting elemental tin with hydrochloric acid; synthetic and not found in any food.

T

Thiamine Mononitrate - USP Vitamin B-1; prepared by removing chloride ions from thiamine chloride hydrochloride through chemical reactions and mixing the result with nitric acid to form a salt; synthetic and not found in any food.

Z

Zinc Aspartate - USP Zinc; prepared by reacting elemental zinc with aspartic acid; synthetic and not found in any food.

Zinc Citrate - USP Zinc; prepared by reacting elemental zinc with citric acid; synthetic and not found in any food.

Zinc Gluconate - USP Zinc; prepared by reacting elemental zinc with gluconic acid; synthetic and not found in any food.

Zinc Oxide - USP Zinc; oxidized/rusted zinc, the same as found in topical solutions, like sunblock; not found in any food.