

Vaccine Excipients

updated April 2018

| Excipient | Type | Vaccine Name | Vaccine Type | Amount per dose |
|-----------------------------|--------------------|---------------|------------------------|--|
| 2-Phenoxyethanol | Stabilizer | Adacel | Tdap | 3.3 mg (0.6% v/v) (not as a preservative) |
| 2-Phenoxyethanol | Stabilizer | Daptacel | DTaP | 3.3 mg (0.6% v/v) (not as a preservative) |
| 2-Phenoxyethanol | Preservative | IPOL | Polio | 0.5% |
| 2-Phenoxyethanol | Stabilizer | Pentacel | DTaP+IPV+Hib | 3.3 mg (0.6 v/v) (not as a preservative) |
| 2-Phenoxyethanol | Stabilizer | Quadracel | DTaP+IPV | 3.3 mg (0.6 v/v) (not as a preservative) |
| Albumin, Bovine | Stabilizer | Vaqta | HepA | <10 ⁻⁴ mcg |
| Albumin, Bovine Serum | Stabilizer | Ixiaro | Japanese Encephalitis | ≤100 ng/mL |
| Albumin, Bovine Serum | Stabilizer | Pentacel | DTaP+IPV+Hib | ≤50 ng |
| Albumin, Bovine Serum | Stabilizer | Quadracel | DTaP+IPV | ≤50 ng |
| Albumin, Bovine Serum | Stabilizer | RabAvert | Rabies | "Small quantities", US origin |
| Albumin, Calf Serum | Stabilizer | Kinrix | DTaP+IPV | VERO cell culture growth |
| Albumin, Calf Serum | Stabilizer | Pediarix | DTaP+HepB+IPV | VERO cell culture growth |
| Albumin, Calf Serum | Stabilizer | Zostavax | Zoster | Trace amounts |
| Albumin, Calf Serum Protein | Stabilizer | IPOL | IPV | <50 ng |
| Albumin, Egg (Ovalbumin) | Residual Medium | Afluria | Influenza | ≤1 mcg |
| Albumin, Egg (Ovalbumin) | Residual Medium | Afluria Quad | Influenza | ≤1 mcg |
| Albumin, Egg (Ovalbumin) | Residual Medium | Fluarix Quad | Influenza | ≤0.05 mcg |
| Albumin, Egg (Ovalbumin) | Residual Medium | Flulaval Quad | Influenza | ≤0.3 mcg |
| Albumin, Egg (Ovalbumin) | Residual Medium | FluMist Quad | Influenza | ≤0.24 mcg |
| Albumin, Egg (Ovalbumin) | Residual Medium | Fluvirin | Influenza | ≤1 mcg |
| Albumin, Egg (Ovalbumin) | Residual Medium | RabAvert | Rabies | ≤3 ng |
| Albumin, Fetal Bovine Serum | Stabilizer | RotaTeq | Rotavirus | Trace amounts |
| Albumin, Fetal Bovine Serum | Stabilizer | Varivax | Varicella | Trace amounts |
| Albumin, Human | Stabilizer | Imovax | Rabies | <100 mg |
| Albumin, Human | Diluent/Stabilizer | MMR-II | MMR | ≤0.3 mg |
| Albumin, Human | Diluent/Stabilizer | ProQuad | MMRV | 0.31 mg |
| Albumin, Human Serum | Diluent/Stabilizer | RabAvert | Rabies | ≤0.3 mg |
| Aluminum | Adjuvant | Adacel | Tdap | 0.33 mg |
| Aluminum | Adjuvant | Bexsero | Meningococcal Group B | 0.519 mg |
| Aluminum | Adjuvant | BioThrax | Anthrax | 1.2 mg/mL |
| Aluminum | Adjuvant | Boostrix | Tdap | ≤0.39 mg |
| Aluminum | Adjuvant | Daptacel | DTaP | 0.33 mg |
| Aluminum | Adjuvant | DT | DT | 1.5 mg aluminum phosphate |
| Aluminum | Adjuvant | Engerix-B | HepB | 0.5 mg/mL |
| Aluminum | Adjuvant | Gardasil | HPV | 225 mcg |
| Aluminum | Adjuvant | Gardasil 9 | HPV | 500 mcg |
| Aluminum | Adjuvant | Havrix | HepA | 0.5 mg/mL |
| Aluminum | Adjuvant | Infanrix | DTaP | ≤0.625 mg |
| Aluminum | Adjuvant | Ixiaro | Japanese Encephalitis | 250 mcg aluminum hydroxide |
| Aluminum | Adjuvant | Kinrix | DTaP+IPV | ≤0.6 mg |
| Aluminum | Adjuvant | Pediarix | DTaP+HepB+IPV | ≤0.85 mg |
| Aluminum | Adjuvant | PedvaxHIB | Hib+HepB | 225 mcg |
| Aluminum | Adjuvant | Pentacel | DTaP+IPV+Hib | 0.33 mg |
| Aluminum | Adjuvant | Prevnar 13 | Pneumococcal 13-valent | 0.125 mcg |
| Aluminum | Adjuvant | Quadracel | DTaP+IPV | 0.33 mg |
| Aluminum | Adjuvant | Recombivax HB | HepB | 0.5 mg/mL |
| Aluminum | Adjuvant | Td (generic) | Td | ≤0.53 mg |
| Aluminum | Adjuvant | Tenivac | Td | 0.33 mg |
| Aluminum | Adjuvant | Trumenba | Meningococcal Group B | 0.25 mg |
| Aluminum | Adjuvant | Twinrix | HepA+HepB | 0.45 mg |
| Aluminum | Adjuvant | Vaqta | HepA | 0.45 mg |
| Amino Acid | Medium Nutrient | BioThrax | Anthrax | Unspecified amount in growth medium |
| Amino Acid | Medium Nutrient | Flublok | Influenza | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | Flublok Quad | Influenza | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | Gardasil | HPV | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | Gardasil 9 | HPV | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | Havrix | HepA | Amino acid supplement - 0.3% w/v |
| Amino Acid | Medium Nutrient | Menveo | Meningococcal | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | MMR-II | MMR | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | PedvaxHIB | Hib+HepB | Amount not specified in Package Insert |
| Amino Acid | Medium Nutrient | Recombivax HB | HepB | In fermentation medium |
| Amino Acid | Medium Nutrient | Rotarix | Rotavirus | In DMEM (Dulbecco's Modified Eagle Medium) |
| Amino Acid | Medium Nutrient | Shingrix | Zoster | Ingredient in growth medium |
| Amino Acid | Medium Nutrient | Twinrix | HepA+HepB | Amount not specified in Package Insert |
| Amino Acid | Medium Nutrient | Vivotif | Typhoid | 1.4-7 mg/capsule |
| Ammonium Sulfate | Protein Purifier | ActHIB | Hib | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Adacel | Tdap | Ingredient in purification |

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| Ammonium Sulfate | Protein Purifier | Daptacel | DTaP | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Menactra | Meningococcal | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Pentacel | DTaP+IPV+Hib | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Prevnar 13 | Pneumococcal 13-valent | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Quadracel | DTaP+IPV | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Td (generic) | Td | Ingredient in purification |
| Ammonium Sulfate | Protein Purifier | Tenivac | Td | Ingredient in purification |
| Amphotericin B | Antimicrobial | RabAvert | Rabies | ≤20 ng |
| Ascorbic Acid | Antioxidant | Vivotif | Typhoid | 1-5 mg/capsule |
| Barium | | Fluad | Influenza | <0.5 mcg |
| Benzethonium Chloride | Preservative | BioThrax | Anthrax | 25 mcg/mL |
| Beta-Propiolactone | Viral Inactivator | Afluria | Influenza | ≤2 ng |
| Beta-Propiolactone | Viral Inactivator | Afluria Quad | Influenza | ≤1.5 ng |
| Beta-Propiolactone | Viral Inactivator | Flucelvax Quad | Influenza | <0.5 mcg |
| Beta-Propiolactone | Viral Inactivator | Fluvirin | Influenza | ≤0.5 mcg |
| Beta-Propiolactone | Viral Inactivator | Imovax | Rabies | <50 ppm |
| Beta-Propiolactone | Viral Inactivator | RabAvert | Rabies | Amount not specified |
| Bovine Casein | Medium Nutrient | ActHIB | Hib | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Boostrix | Tdap | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | DT | DT | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Infanrix | DTaP | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Kinrix | DTaP+IPV | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Menactra | Meningococcal | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Pediarix | DTaP+HepB+IPV | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Typhim Vi | Typhoid | Amount not specified in Package Insert |
| Bovine Casein | Medium Nutrient | Vivotif | Typhoid | Amount not specified in Package Insert |
| Bovine Extract | Medium Nutrient | Boostrix | Tdap | Amount not specified in Package Insert |
| Bovine Extract | Stabilizer | Infanrix | DTaP | Amount not specified in Package Insert |
| Bovine Extract | Stabilizer | Kinrix | DTaP+IPV | Amount not specified in Package Insert |
| Bovine Extract | Stabilizer | Pediarix | DTaP+HepB+IPV | Amount not specified in Package Insert |
| Bovine Extract | Stabilizer | Td (generic) | Td | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Adacel | Tdap | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Daptacel | DTaP | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Menactra | Meningococcal | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Menomune | Meningococcal | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Pentacel | DTaP+IPV+Hib | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Prevnar 13 | Pneumococcal 13-valent | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Quadracel | DTaP+IPV | Amount not specified in Package Insert |
| Bovine, Casamino Acid | Stabilizer | Tenivac | Td | Amount not specified in Package Insert |
| Calcium Carbonate | Buffer | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Calcium Chloride | Medium Nutrient | Afluria | Influenza | 0.5 mcg |
| Calcium Chloride | Medium Nutrient | Afluria Quad | Influenza | 0.5 mcg |
| Calcium Chloride | Medium Nutrient | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Carbohydrates | Medium Nutrient | Gardasil | HPV | Amount not specified in Package Insert |
| Carbohydrates | Medium Nutrient | Gardasil 9 | HPV | Amount not specified in Package Insert |
| Chick Embryo | Residual Medium | MMR-II | MMR | No intact cells (may have trace residual protein) |
| Chick Embryo | Residual Medium | ProQuad | MMRV | No intact cells (may have trace residual protein) |
| Chick Embryo | Residual Medium | RabAvert | Rabies | No intact cells (may have trace residual protein) |
| Chick Embryo | Residual Medium | YF-Vax | Yellow Fever | Growth medium |
| Chick fibroblasts | Protein Purifier | RabAvert | Rabies | Growth medium |
| Chlortetracycline | Antimicrobial | RabAvert | Rabies | ≤200 ng |
| Citric Acid Monohydrate | | Fluad | Influenza | 0.04 mg |
| CTAB | Protein Purifier | Fluad | Influenza | ≤12 mcg |
| CTAB | Protein Purifier | Flucelvax Quad | Influenza | ≤18 mcg |
| Dextrose | Medium Nutrient | DT | DT | Amount not specified in Package Insert |
| Dextrose | Medium Nutrient | Recombivax HB | HepB | Ingredient in fermentation medium |
| Dextrose | Medium Nutrient | Vivotif | Typhoid | Ingredient in medium |
| D-glucose | Medium Nutrient | Rotarix | Rotavirus | In DMEM (Dulbecco's Modified Eagle Medium) |
| Dimethyl-beta-cyclodextrin | Medium Nutrient | Adacel | Tdap | Amount not specified in Package Insert |
| Dimethyl-beta-cyclodextrin | Medium Nutrient | Daptacel | DTaP | Amount not specified in Package Insert |
| Dimethyl-beta-cyclodextrin | Medium Nutrient | Pentacel | DTaP+IPV+Hib | Ingredient in Stainer-Scholte medium |
| DNA | Residual Medium | Flublok | Influenza | ≤10 ng |
| DNA | Residual Medium | Flublok Quad | Influenza | ≤10 ng |
| DNA | Residual Medium | Flucelvax Quad | Influenza | ≤10 ng MDCK cell |
| DNA | Residual Medium | Ixiaro | Japanese Encephalitis | ≤200 pg/mL ('host cell DNA') |
| DNA | Residual Medium | ProQuad | MMRV | Residual component of MRC-5 cells |
| DNA | Residual Medium | RotaTeq | Rotavirus | Residual component of manufacturing process |

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| DNA | Residual Medium | Shingrix | Zoster | ≤2.1 pg |
| DNA | Residual Medium | Vaqta | HepA | <4 x 10 ⁻⁶ mcg |
| DNA | Residual Medium | Varivax | Varicella | Residual component of MRC-5 cells |
| DNA | Residual Medium | Zostavax | Zoster | Residual component of MRC-5 cells |
| DOPC | Adjuvant | Shingrix | Zoster | 1 mg |
| EDTA | Preservative | FluMist Quad | Influenza | <0.37 mcg |
| EDTA | Preservative | RabAvert | Rabies | 0.3 mg sodium EDTA |
| EDTA | Preservative | Varivax | Varicella | Trace amounts |
| Egg Protein | Residual Medium | Fluad | Influenza | <0.4 mcg |
| Egg Protein | Residual Medium | Fluvirin | Influenza | ≤1 mcg ovalbumin |
| Ferric (III) Nitrate | Medium Nutrient | Rotarix | Rotavirus | In DMEM (Dulbecco's Modified Eagle Medium) |
| Formaldehyde | Inactivating Agent | ActHIB | Hib | <0.5 mcg |
| Formaldehyde | Inactivating Agent | Adacel | Tdap | ≤5 mcg |
| Formaldehyde | Preservative | BioThrax | Anthrax | 100 mg/mL |
| Formaldehyde | Inactivating Agent | Boostrix | Tdap | ≤100 mcg (residual) |
| Formaldehyde | Inactivating Agent | Daptacel | DTaP | ≤5 mcg (residual) |
| Formaldehyde | Inactivating Agent | DT | DT | <100 mcg |
| Formaldehyde | Inactivating Agent | Fluad | Influenza | ≤10 mcg |
| Formaldehyde | Inactivating Agent | Fluarix Quad | Influenza | ≤5 mcg |
| Formaldehyde | Inactivating Agent | Flulaval Quad | Influenza | ≤25 mcg |
| Formaldehyde | Inactivating Agent | FluZone High-Dose | Influenza | ≤100 mcg |
| Formaldehyde | Inactivating Agent | FluZone Id Quad | Influenza | ≤20 mcg |
| Formaldehyde | Inactivating Agent | FluZone Quad | Influenza | ≤100 mcg |
| Formaldehyde | Inactivating Agent | Hiberix | Hib | <0.5 mcg (residual) |
| Formaldehyde | Inactivating Agent | Infanrix | DTaP | ≤100 mcg (residual) |
| Formaldehyde | Inactivating Agent | IPOL | Polio | ≤0.02% |
| Formaldehyde | Inactivating Agent | Ixiaro | Japanese Encephalitis | ≤200 pmm |
| Formaldehyde | Inactivating Agent | JE-Vax | Japanese Encephalitis | <100 mcg |
| Formaldehyde | Inactivating Agent | Kinrix | DTaP+IPV | ≤100 mcg (residual) |
| Formaldehyde | Inactivating Agent | Menactra | Meningococcal | <2.66 mcg |
| Formaldehyde | Inactivating Agent | Menveo | Meningococcal | ≤0.3 mcg |
| Formaldehyde | Inactivating Agent | Pediarix | DTaP+HepB+IPV | ≤100 mcg (residual) |
| Formaldehyde | Inactivating Agent | Pentacel | DTaP+IPV+Hib | ≤5 mcg (residual) |
| Formaldehyde | Inactivating Agent | Quadracel | DTaP+IPV | ≤5 mcg |
| Formaldehyde | Inactivating Agent | Recombivax HB | HepB | <15 mcg/mL (residual) |
| Formaldehyde | Inactivating Agent | Td (generic) | Td | 100 mcg |
| Formaldehyde | Inactivating Agent | Tenivac | Td | ≤5 mcg (residual) |
| Formaldehyde | Inactivating Agent | Twinrix | HepA+HepB | ≤0.1 mg formalin |
| Formaldehyde | Inactivating Agent | Typhim Vi | Typhoid | ≤100 mcg (residual) |
| Formaldehyde | Inactivating Agent | Vaqta | HepA | <0.8 mcg |
| Galactose | Medium Nutrient | Vivotif | Typhoid | Ingredient in medium |
| Gelatin | Manufacturing Residue | JE-Vax | Japanese Encephalitis | 500 mcg/1 mL dose |
| Gelatin | Gelatin Capsules | Vivotif | Typhoid | Gelatin capsules |
| Gelatin | Stabilizer | YF-Vax | Yellow Fever | Amount not specified in Package Insert |
| Gelatin, Bovine | Stabilizer, solvent | RabAvert | Rabies | <12 mg polygeline |
| Gelatin, hydrolyzed | Stabilizer | MMR-II | MMR | 14.5 mg |
| Gelatin, hydrolyzed | Stabilizer | ProQuad | MMRV | 11 mg |
| Gelatin, hydrolyzed | Stabilizer | Varivax | Varicella | 12.5 mg |
| Gelatin, Porcine, Hydrolyzed | Stabilizer | FluMist Quad | Influenza | 2.00 mg/0.2 mLdose |
| Gelatin, Porcine, Hydrolyzed | Stabilizer | Zostavax | Varicella Zoster | 15.58 mg |
| Gentamicin Sulfate | Antimicrobial | Fluarix Quad | Influenza | ≤0.15 mcg |
| Gentamicin Sulfate | Antimicrobial | FluMist Quad | Influenza | <0.015 mcg/mL |
| Glutamate | Medium Nutrient | MMR-II | MMR | Ingredient in growth medium (Medium 199) |
| Glutaraldehyde | Inactivating Agent | Adacel | Tdap | <50 ng (residual) |
| Glutaraldehyde | Inactivating Agent | Boostrix | Tdap | Amount not specified in Package Insert |
| Glutaraldehyde | Inactivating Agent | Daptacel | DTaP | <50 ng (residual) |
| Glutaraldehyde | Inactivating Agent | Infanrix | DTaP | Amount not specified in Package Insert |
| Glutaraldehyde | Inactivating Agent | Kinrix | DTaP+IPV | Amount not specified in Package Insert |
| Glutaraldehyde | Inactivating Agent | Pediarix | DTaP+HepB+IPV | Amount not specified in Package Insert |
| Glutaraldehyde | Inactivating Agent | Pentacel | DTaP+IPV+Hib | <50 ng (residual) |
| Glutaraldehyde | Inactivating Agent | Quadracel | DTaP+IPV | <50 ng |
| Hexadecyltrimethylammonium Bromide | Protein Purifier | Typhim Vi | Typhoid | Amount not specified in Package Insert |
| Histidine | Medium Nutrient | Bexsero | Meningococcal Group B | 0.776 mg |
| Histidine | Medium Nutrient | Trumenba | Meningococcal Group B | 10 mM |
| Hydrocortisone | Medium Nutrient | Fluarix Quad | Influenza | ≤0.0016 mcg |
| Kanamycin | Antimicrobial | Bexero | Meningococcal | 0.01 mcg |
| Kanamycin | Antimicrobial | Fluad | Influenza | ≤0.01 mcg |
| Lactalbumin Hydrolysate | Medium Nutrient | Kinrix | DTaP+IPV | Ingredient in growth medium |
| Lactalbumin Hydrolysate | Medium Nutrient | Pediarix | DTaP+HepB+IPV | Ingredient in growth medium |
| Lactose | Stabilizer | BCG Vaccine | BCG | Amount not specified in Package Insert |

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| Lactose | Stabilizer | Hiberix | Hib | 12.6 mg |
| Lactose | Stabilizer | Menomune | Meningococcal | 2.5-5 mg |
| Lactose | Stabilizer | Vivotif | Typhoid | 100-180 mg/capsule |
| L-cystine | Medium Nutrient | Rotarix | Rotavirus | Amount not specified in Package Insert |
| L-histidine | Medium Nutrient | Gardasil | HPV | 0.78 mg |
| L-histidine | Medium Nutrient | Gardasil 9 | HPV | 0.78 mg |
| L-tyrosine | Medium Nutrient | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Magnesium Stearate | Lubricant for capsule filling | Vivotif | Typhoid | 3.6-4.4 mg/capsule |
| Magnesium Sulfate | Medium Nutrient | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Monosodium glutamate | Stabilizer | FluMist Quad | Influenza | 0.188 mg/0.2 mL dose |
| Monosodium L-glutamate | Stabilizer | ProQuad | MMRV | 0.40 mg |
| Monosodium L-glutamate | Stabilizer | Varivax | Varicella | 0.5 mg |
| Monosodium L-glutamate | Stabilizer | Zostavax | Varicella Zoster | 0.62 mg |
| Mouse Serum Protein | Manufacturing Residue | JE-Vax | Japanese Encephalitis | <50 ng |
| MRC-5 | Manufacturing Residue | Havrix | HepA | ≤5 mcg/mL |
| MRC-5 | Manufacturing Residue | Imovax | Rabies | Amount not specified in Package Insert |
| MRC-5 | Growth Medium | Pentacel | DTaP+IPV+Hib | Amount not specified in Package Insert |
| MRC-5 | Manufacturing Residue | ProQuad | MMRV | Residual |
| MRC-5 | Manufacturing Residue | Quadracel | DTaP+IPV | Ingredient in growth medium |
| MRC-5 | Manufacturing Residue | Twinrix | HepA+HepB | ≤2.5 mcg |
| MRC-5 | Manufacturing Residue | Vaqta | HepA | Amount not specified in Package Insert |
| MRC-5 | Manufacturing Residue | Varivax | Varicella | Residual components |
| MRC-5 | Manufacturing Residue | Zostavax | Varicella Zoster | Residual |
| Neomycin | Antimicrobial | Fluad | Influenza | ≤0.02 mcg |
| Neomycin | Antimicrobial | Fluvirin | Influenza | ≤2.5 mcg |
| Neomycin | Antimicrobial | Havrix | HepA | ≤40 ng |
| Neomycin | Antimicrobial | IPOL | IPV | <5 ng |
| Neomycin | Antimicrobial | Kinrix | DTaP+IPV | ≤0.05 ng |
| Neomycin | Antimicrobial | MMR-II | MMR | 25 mcg |
| Neomycin | Antimicrobial | Pediarix | DTaP+HepB+IPV | ≤0.05 ng |
| Neomycin | Antimicrobial | Pentacel | DTaP+IPV+Hib | <4 pg |
| Neomycin | Antimicrobial | ProQuad | MMRV | <16 mcg |
| Neomycin | Antimicrobial | Quadracel | DTaP+IPV | <4 pg |
| Neomycin | Antimicrobial | RabAvert | Rabies | <10 mcg |
| Neomycin | Antimicrobial | Vaqta | HepA | <10 ppb (residual) |
| Neomycin | Antimicrobial | Varivax | Varicella | Trace amounts |
| Neomycin | Antimicrobial | Zostavax | Varicella Zoster | Trace amounts |
| Neomycin Sulfate | Antimicrobial | Afluria | Influenza | ≤61.5 ng |
| Neomycin Sulfate | Antimicrobial | Afluria Quad | Influenza | ≤81.8 ng |
| Neomycin Sulfate | Antimicrobial | Imovax | Rabies | <150 mcg |
| Neomycin Sulfate | Antimicrobial | Twinrix | HepA+HepB | ≤20 ng |
| Nonylphenol Ethoxylate | Surfactant | Fluvirin | Influenza | ≤0.015% w/v |
| Octoxynol-10 (Triton X-100) | Surfactant | Fluarix Quad | Influenza | ≤0.115 mg |
| Octoxynol-10 (Triton X-100) | Surfactant | Flublok | Influenza | ≤100 mcg |
| Octoxynol-10 (Triton X-100) | Surfactant | Flublok Quad | Influenza | ≤100 mcg |
| Octylphenol Ethoxylate (Triton X-100) | Surfactant | FluZone High-Dose | Influenza | ≤250 mcg |
| Octylphenol Ethoxylate (Triton X-100) | Surfactant | FluZone Intradermal Quad | Influenza | ≤55 mcg |
| Octylphenol Ethoxylate (Triton X-100) | Surfactant | FluZone Quad | Influenza | ≤250 mcg/0.5mL |
| Peptone, Soy | Medium Nutrient | Prevnar 13 | Pneumococcal 13-valent | Growth medium |
| Peptone, Soy | Medium Nutrient | Recombivax HB | HepB | Ingredient in fermentation medium |
| Phenol | Preservative, antibacterial | PedvaxHIB | Hib+HepB | Ingredient in purification procedure |
| Phenol | Preservative | Pneumovax 23 | Pneumococcal 23-valent | Saline containing 0.25% phenol |
| Phenol | Preservative | Typhim Vi | Typhoid | 0.25% |
| Phenol Red Indicator | pH indicator, dye | Imovax | Rabies | 20 mcg |
| Phenol Red Indicator | pH indicator, dye | Rotarix | Rotavirus | Ingredient in growth medium |
| Phosphate Buffer | Buffer | Afluria | Influenza | 20 mcg monobasic potassium phosphate 80 mcg monobasic sodium phosphate 300 mcg dibasic sodium phosphate |
| Phosphate Buffer | Buffer | Afluria Quad | Influenza | 20 mcg monobasic potassium phosphate 80 mcg monobasic sodium phosphate 300 mcg dibasic sodium phosphate |
| Phosphate Buffer | Buffer | Engerix-B | HepB | 0.98 mg/mL disodium phosphate dihydrate 0.71 mg/mL sodium dihydrogen phosphate dihydrate |
| Phosphate Buffer | Buffer | Flublok | Influenza | 0.195 mcg monobasic sodium phosphate 1.3 mg dibasic sodium phosphate |

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| Phosphate Buffer | Buffer | Flublok Quad | Influenza | 0.195 mcg monobasic sodium phosphate 1.3 mg dibasic sodium phosphate |
| Phosphate Buffer | Buffer | FluMist Quad | Influenza | 0.96 mg/0.2 mL dose monobasic potassium phosphate 2.26 mg/dose dibasic potassium phosphate |
| Phosphate Buffer | Buffer | FluZone High-Dose | Influenza | Sodium phosphate-buffered isotonic sodium chloride solution - "quantity sufficient to appropriate volume" |
| Phosphate Buffer | Buffer | FluZone Intradermal Quad | Influenza | Sodium phosphate-buffered isotonic sodium chloride solution - "quantity sufficient to appropriate volume" |
| Phosphate Buffer | Buffer | FluZone Quad | Influenza | Sodium phosphate-buffered isotonic sodium chloride solution - "quantity sufficient to appropriate volume" |
| Phosphate Buffer | Buffer | Hepelisav-B | | 9.0 mg/mL sodium chloride 1.75 mg/mL sodium phosphate, dibasic dodecahydrate 0.48 mg/mL sodium phosphate, monobasic dihydrate |
| Phosphate Buffer | Buffer | Ixiaro | Japanese Encephalitis | potassium dihydrogen phosphate 0.5 mL phosphate buffered saline |
| Phosphate Buffer | Buffer | Menactra | Meningococcal | Sodium phosphate buffered isotonic sodium chloride solution, amount not specified |
| Phosphate Buffer | Buffer | MMR-II | MMR | Sodium phosphate, amount not specified |
| Phosphate Buffer | Buffer | ProQuad | MMRV | 36 mcg potassium phosphate dibasic 72 mcg potassium phosphate monobasic 0.34 mg sodium phosphate dibasic |
| Phosphate Buffer | Buffer | Rotarix | Rotavirus | Sodium phosphate in DMEM (medium) |
| Phosphate Buffer | Buffer | RotaTeq | Rotavirus | Sodium phosphate monobasic monohydrate |
| Phosphate Buffer | Buffer | Shingrix | Zoster | 0.54 mg potassium dihydrogen phosphate 0.160 mg sodium dihydrogen phosphate dihydrate 0.15 mg disodium phosphate anhydrous, 0.116 mg dipotassium phosphate |
| Phosphate Buffer | Buffer | Twinrix | HepA+HepB | Amount not specified in Package Insert |
| Phosphate Buffer | Buffer | Typhim Vi | Typhoid | 0.065 mg disodium phosphate 0.023 mg monosodium phosphate |
| Phosphate Buffer | Buffer | Varivax | Varicella | 0.08 mg potassium phosphate monobasic 0.45 mg sodium phosphate dibasic Sodium phosphate monobasic, trace amounts |
| Phosphate Buffer | Buffer | Zostavax | Varicella Zoster | 0.10 mg potassium phosphate monobasic 0.57 mg sodium phosphate monobasic |
| Polymyxin | Antimicrobial | Fluvirin | Influenza | ≤3.75 mcg |
| Polymyxin B | Antimicrobial | Afluria | Influenza | ≤10.5 ng |
| Polymyxin B | Antimicrobial | Afluria Quad | Influenza | ≤10.5 ng |
| Polymyxin B | Antimicrobial | IPOLE | Polio | 25 ng |
| Polymyxin B | Antimicrobial | Kinrix | DTaP+IPV | ≤0.01 ng |
| Polymyxin B | Antimicrobial | Pediarix | DTaP+HepB+IPV | ≤0.01 ng |
| Polymyxin B | Antimicrobial | Pentacel | DTaP+IPV+Hib | <4 pg |
| Polymyxin B sulfate | Antimicrobial | Quadracel | DTaP+IPV | <4 pg |
| Polysorbate 20 | Surfactant | Flublok | Influenza | ≤27.5 mcg (Tween 20) |
| Polysorbate 20 | Surfactant | Flublok Quad | Influenza | ≤27.5 mcg (Tween 20) |
| Polysorbate 20 | Surfactant | Havrix | HepA | 0.05 mg/mL |
| Polysorbate 20 | Surfactant | Twinrix | HepA+HepB | Amount not specified in Package Insert |
| Polysorbate 80 | Surfactant | Boostrix | Tdap | ≤100 mcg (Tween 80) |
| Polysorbate 80 | Surfactant | Fluad | Influenza | 1.175 mg |
| Polysorbate 80 | Surfactant | Fluarix Quad | Influenza | ≤0.550 mg (Tween 80) |
| Polysorbate 80 | Surfactant | Flucelvax Quad | Influenza | ≤1500 mcg (Tween 80) |
| Polysorbate 80 | Surfactant | Flulaval Quad | Influenza | ≤887 mcg |
| Polysorbate 80 | Surfactant | Gardasil | HPV | 50 mcg |
| Polysorbate 80 | Surfactant | Gardasil 9 | HPV | 50 mcg |
| Polysorbate 80 | Surfactant | Hepelisav-B | HepB | 0.1 mg/mL |
| Polysorbate 80 | Surfactant | Infanrix | DTaP | ≤100 mcg (Tween 80) |
| Polysorbate 80 | Surfactant | JE-Vax | Japanese Encephalitis | <0.0007% |
| Polysorbate 80 | Surfactant | Kinrix | DTaP+IPV | ≤100 mcg (Tween 80) |
| Polysorbate 80 | Surfactant | Pediarix | DTaP+HepB+IPV | ≤100 mcg (Tween 80) |
| Polysorbate 80 | Surfactant | Pentacel | DTaP+IPV+Hib | 10 ppm |
| Polysorbate 80 | Surfactant | Prevnam 13 | Pneumococcal 13-valent | 100 mcg |
| Polysorbate 80 | Surfactant | Quadracel | DTaP+IPV | 10 ppm |
| Polysorbate 80 | Surfactant | RotaTeq | Rotavirus | Amount not specified in Package Insert |
| Polysorbate 80 | Surfactant | Shingrix | Zoster | 0.08 mg |

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| Polysorbate 80 | Surfactant | Trumenba | Meningococcal Group B | 0.018 mg |
| Porcine DNA | Residual Medium | Rotarix | Rotavirus | PCV-1 |
| Porcine DNA | Residual Medium | RotaTeq | Rotavirus | PCV-1 and PCV-2 |
| Potassium Aluminum Sulfate | Adjuvant | Recombivax HB | HepB | Amount not specified in Package Insert |
| Potassium Chloride | Buffer | Afluria | Influenza | 20 mcg |
| Potassium Chloride | Buffer | Afluria Quad | Influenza | 20 mcg |
| Potassium Chloride | Buffer | ProQuad | MMRV | 60 mcg |
| Potassium Chloride | Medium Nutrient | Rotarix | Rotavirus | Ingredient in DMEM medium |
| Potassium Chloride | Buffer | Varivax | Varicella | 0.08 mg |
| Potassium Chloride | Buffer | Zostavax | Varicella Zoster | 0.10 mg |
| Potassium Glutamate | Stabilizer | RabAvert | Rabies | 1 mg |
| Protamine Sulfate | Protein Purifier | Ixiaro | Japanese Encephalitis | ≤1 mcg/mL |
| Salts and Sugars, Inorganic | Medium Nutrient | BioThrax | Anthrax | Amount not specified in Package Insert |
| Salts, Inorganic | Medium Nutrient | DT | DT | Sodium chloride |
| Salts, Inorganic | Medium Nutrient | Twinrix | HepA+HepB | Sodium chloride |
| Salts, Mineral | Adjust tonicity | ActHIB | Hib | 0.4% sodium chloride in diluent |
| Salts, Mineral | Adjust tonicity | Afluria | Influenza | 4.1 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Afluria Quad | Influenza | 4.1 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Bexsero | Meningococcal Group B | 3.125 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | BioThrax | Anthrax | 0.85% sodium chloride |
| Salts, Mineral | Adjust tonicity | Boostrix | Tdap | 4.4 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Engerix-B | HepB | 9 mg/mL sodium chloride |
| Salts, Mineral | Adjust tonicity | Flublok | Influenza | 4.4 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Flublok Quad | Influenza | 4.4 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Gardasil | HPV | 9.56 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Gardasil 9 | HPV | 9.56 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Hiberix | Hib | 0.9% sodium chloride in diluent |
| Salts, Mineral | Adjust tonicity | Infanrix | DTaP | 4.5 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Kinrix | DTaP+IPV | 4.5 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | MMR-II | MMR | Sodium chloride, amount not specified |
| Salts, Mineral | Adjust tonicity | Pediarix | DTaP+HepB+IPV | 4.5 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | PedvaxHIB | Hib+HepB | 0.9% sodium chloride |
| Salts, Mineral | Adjust tonicity | ProQuad | MMRV | 2.4 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Recombivax HB | HepB | Ingredient in fermentation medium |
| Salts, Mineral | Adjust tonicity | Rotarix | Rotavirus | In DMEM (Dulbecco's Modified Eagle Medium) |
| Salts, Mineral | Adjust tonicity | Shingrix | Zoster | 4.385 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Tenivac | Td | Sodium chloride, amount not specified |
| Salts, Mineral | Adjust tonicity | Twinrix | HepA+HepB | Sodium chloride, amount not specified |
| Salts, Mineral | Adjust tonicity | Typhim Vi | Typhoid | 4.150 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | Vaqta | HepA | 0.9% sodium chloride |
| Salts, Mineral | Adjust tonicity | Varivax | Varicella | 3.2 mg sodium chloride |
| Salts, Mineral | Adjust tonicity | YF-Vax | Yellow Fever | Diluent |
| Salts, Mineral | Adjust tonicity | Zostavax | Varicella Zoster | 3.99 mg sodium chloride |
| Sodium Bicarbonate | Buffer | ProQuad | MMRV | 0.17 mg |
| Sodium Borate | Buffer | Gardasil | HPV | 35 mcg |
| Sodium Borate | Buffer | Gardasil 9 | HPV | 35 mcg |
| Sodium Borate | Stabilizer | Vaqta | HepA | 70 mcg/mL |
| Sodium Citrate | Adjust pH | RotaTeq | Rotavirus | Amount not specified in Package Insert |
| Sodium Citrate Dihydrate | | Fluad | Influenza | 0.66 mg |
| Sodium Deoxycholate | Surfactant | Fluarix Quad | Influenza | ≤65 mcg |
| Sodium Deoxycholate | Surfactant | Flulaval Quad | Influenza | ≤50 mcg |
| Sodium Hydroxide | | RotaTeq | Rotavirus | Amount not specified in Package Insert |
| Sodium Metabisulphite | Stabilizer | Ixiaro | Japanese Encephalitis | ≤200 ppm |
| Sodium Pyruvate | Medium Nutrient | Rotarix | Rotavirus | in DMEM (medium) |
| Sodium Taurodeoxycholate | Protein Purifier | Afluria Quad | Influenza | ≤10 ppm (residual) |
| Sorbitan Trioleate | | Fluad | Influenza | 1.175 mg |
| Sorbitol | Stabilizer, solvent | MMR-II | MMR | 14.5 mg |
| Sorbitol | Stabilizer, solvent | ProQuad | MMRV | 1.8 mg |
| Sorbitol | Stabilizer, solvent | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Sorbitol | Stabilizer, solvent | YF-Vax | Yellow Fever | Amount not specified in Package Insert |
| Streptomycin | Antimicrobial | IPOL | Polio | 200 ng |
| Succinate Buffer | Stabilizer | Pprevnar 13 | Pneumococcal 13-valent | 295 mcg |
| Sucrose | Stabilizer | ActHIB | Hib | 8.5% |
| Sucrose | Stabilizer | Afluria | Influenza | <10 mcg |
| Sucrose | Stabilizer | Afluria Quad | Influenza | <10 mcg |
| Sucrose | Stabilizer | Bexsero | Meningococcal Group B | 10 mg |
| Sucrose | Stabilizer | FluMist Quad | Influenza | 13.68 mg/0.2 mL dose |
| Sucrose | Stabilizer | JE-Vax | Japanese Encephalitis | 40% w/v |
| Sucrose | Stabilizer | MMR-II | MMR | 1.9 mg |

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| Sucrose | Stabilizer | Pentacel | DTaP+IPV+Hib | 42.5 mg |
| Sucrose | Stabilizer | ProQuad | MMRV | ≤21 mg |
| Sucrose | Stabilizer | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Sucrose | Stabilizer | RotaTeq | Rotavirus | Amount not specified in Package Insert |
| Sucrose | Stabilizer | Shingrix | Zoster | 20 mg |
| Sucrose | Stabilizer | Varivax | Varicella | 25 mg |
| Sucrose | Stabilizer | Vivotif | Typhoid | 3.3-34.2 mg/capsule |
| Sucrose | Stabilizer | Zostavax | Varicella Zoster | 31.16 mg |
| Thimerosal | Preservative | Afluria | Influenza | 24.5 mcg mercury only in multi-dose vial; none in single dose |
| Thimerosal | Preservative | Afluria Quad | Influenza | 24.5 mcg mercury only in multi-dose vial; none in single dose |
| Thimerosal | Manufacturing Residue | DT | DT | ≤0.3 mcg mercury, trace amounts |
| Thimerosal | Preservative | Flulaval Quad | Influenza | <25 mcg mercury only in multi-dose vial; none in single dose |
| Thimerosal | Preservative | Fluvirin | Influenza | 25 mcg mercury/dose in multi-dose vial; ≤1 mcg/dose mercury in prefilled syringe |
| Thimerosal | Preservative | FluZone Quad | Influenza | 25 mcg mercury in multi-dose vial; none in single dose |
| Thimerosal | Preservative | JE-Vax | Japanese Encephalitis | 0.007% |
| Thimerosal | Preservative | Menomune | Meningococcal | 25 mcg mercury/dose in multi-dose diluent; none in single-dose |
| Thimerosal | Manufacturing Residue | Td (generic) | Td | ≤0.3 mcg mercury, trace amounts |
| Vero Cells | Growth Medium | IPOLE | Polio | Amount not specified in Package Insert |
| Vero cells | Medium Nutrient | Ixiaro | Japanese Encephalitis | Amount not specified in Package Insert |
| Vero Cells | Growth Medium | Kinrix | DTaP+IPV | Amount not specified in Package Insert |
| Vero Cells | Growth Medium | Pediarix | DTaP+HepB+IPV | Amount not specified in Package Insert |
| Vero Cells | Growth Medium | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Vero Cells | Growth Medium | RotaTeq | Rotavirus | Amount not specified in Package Insert |
| Vitamins | Medium Nutrient | BioThrax | Anthrax | Ingredient in growth medium |
| Vitamins | Medium Nutrient | DT | DT | Ingredient in growth medium |
| Vitamins | Protein Purifier | Fluarix Quad | Influenza | ≤0.135 mg α-tocopheryl hydrogen succinate |
| Vitamins | Protein Purifier | Flublok | Influenza | Ingredient in growth medium |
| Vitamins | Protein Purifier | Flublok Quad | Influenza | Ingredient in growth medium |
| Vitamins | Protein Purifier | Flulaval Quad | Influenza | ≤320 mcg α-tocopheryl hydrogen succinate |
| Vitamins | Medium Nutrient | Gardasil | HPV | Ingredient in growth medium |
| Vitamins | Medium Nutrient | Gardasil 9 | HPV | Ingredient in growth medium |
| Vitamins | Medium Nutrient | Heplisav-B | HepB | Ingredient in grown media |
| Vitamins | Medium Nutrient | MMR-II | MMR | Ingredient in grown media |
| Vitamins | Medium Nutrient | Rotarix | Rotavirus | Amount not specified in Package Insert |
| Xanthan | Thickening agent | Rotarix | Rotavirus | Ingredient in diluent |
| Yeast | Medium Nutrient | Engerix-B | HepB | ≤5% yeast protein |
| Yeast | Medium Nutrient | Gardasil | HPV | <7 mcg yeast protein/dose |
| Yeast | Medium Nutrient | Gardasil 9 | HPV | <7 mcg yeast protein/dose |
| Yeast | Medium Nutrient | Heplisav-B | HepB | Ingredient in growth medium |
| Yeast | Medium Nutrient | Menveo | Meningococcal | Ingredient in growth medium |
| Yeast | Medium Nutrient | Pediarix | DTaP+HepB+IPV | ≤5% yeast protein |
| Yeast | Medium Nutrient | Prevnar 13 | Pneumococcal 13-valent | Ingredient in growth medium |
| Yeast | Medium Nutrient | Recombivax HB | HepB | <1% yeast protein |
| Yeast | Medium Nutrient | Twinrix | HepA+HepB | ≤5% yeast protein |
| Yeast | Medium Nutrient | Vivotif | Typhoid | Amount not specified in Package Insert |

This information is correct to the best of our knowledge. Any inaccuracies should be reported to us at info@hopkinsvaccine.org

This table was last updated on April 20, 2018

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