

# Potential Vaccine Allergens

updated March 2023

Excipient	Purpose	Vaccine Name	Vaccine Type	Amount per 0.5 mL Dose
Acetic Acid	Adjust pH	Spikevax (Moderna)	COVID-19	0.043 mg
Albumin, Bovine	Stabilizer	Vaqta	HepA	<10 <sup>-4</sup> mcg
Albumin, Bovine	Stabilizer	Zostavax	Varicella Zoster	Trace amounts
Albumin, Bovine Serum	Stabilizer	Pediarix	DTaP+HepB+IPV	VERO cell culture growth
Albumin, Bovine Serum	Stabilizer	Kinrix	DTaP+IPV	VERO cell culture growth
Albumin, Bovine Serum	Stabilizer	Quadracel	DTaP+IPV	≤50 ng
Albumin, Bovine Serum	Stabilizer	Vaxelis	DTaP+IPV+HepB	≤50 ng
Albumin, Bovine Serum	Stabilizer	Pentacel	DTaP+IPV+Hib	≤50 ng
Albumin, Bovine Serum	Stabilizer	Prehevbrio	HepB	<2.5 ng/mL
Albumin, Bovine Serum	Stabilizer	Ixiaro	Japanese Encephalitis	≤100 ng/mL
Albumin, Bovine Serum	Stabilizer	MMR-II	MMR	<1 ppm
Albumin, Bovine serum	Stabilizer	Priorix	MMR	≤50 mcg
Albumin, Bovine Serum	Stabilizer	RabAvert	Rabies	"Small quantities", US origin
Albumin, Bovine Serum	Stabilizer	RotaTeq	Rotavirus	Trace amounts
Albumin, Bovine Serum	Stabilizer	Varivax	Varicella	Trace amounts
Albumin, Calf Serum Protein	Stabilizer	IPOL	IPV	<50 ng
Albumin, Egg (Ovalbumin)	Residual Medium	Afluria Quad	Influenza	≤1 mcg
Albumin, Egg (Ovalbumin)	Residual Medium	Fluad Quad	Influenza	≤1.5 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	≤0.024 mcg/0.2mL dose
Albumin, Egg (Ovalbumin)	Residual Medium	Fluvirin	Influenza	≤1 mcg
Albumin, Egg (Ovalbumin)	Residual Medium	Priorix	MMR	≤60 mcg
Albumin, Egg (Ovalbumin)	Residual Medium	RabAvert	Rabies	≤3 ng/1 mL dose
Amphotericin B	Antimicrobial	RabAvert	Rabies	≤20 ng/1 mL dose
Chlortetracycline	Antimicrobial	RabAvert	Rabies	≤200 ng/1 mL dose
Egg Protein	Residual Medium	Fluad	Influenza	<0.4 mcg
Gelatin	Manufacturing Residue	JE-Vax	Japanese Encephalitis	500 mcg/1 mL dose
Gelatin	Gelatin Capsules	Vivotif	Typhoid	Gelatin Capsule
Gelatin	Manufacturing Residue	YF-Vax	Yellow Fever	Amount not specified in package insert
Gelatin, Bovine	Stabilizer, solvent	RabAvert	Rabies	≤12 mg/1 mL dose 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 mL dose
Gelatin, Porcine, Hydrolyzed	Stabilizer	Zostavax	Varicella Zoster	15.58 mg/0.65 mL dose
Gentamicin	Antimicrobial	Jynneos	Smallpox and Monkeypox	≤ 0.163 mcg
Gentamicin Sulfate	Antimicrobial	Fluarix Quad	Influenza	≤0.15 mcg
Gentamicin Sulfate	Antimicrobial	FluMist Quad	Influenza	<0.015 mcg/mL
Latex	Pharmaceutical closure	Boostrix	Tdap	Tip caps of prefilled syringes contain natural rubber latex
Latex	Pharmaceutical closure	Engerix-B	HepB	Tip caps of prefilled syringes contain natural rubber latex
Latex	Pharmaceutical closure	Fluvirin	Influenza	Tip caps of prefilled syringes may contain natural rubber latex
Latex	Pharmaceutical closure	Havrix	HepA	Tip caps of prefilled syringes contain natural rubber latex
Latex	Pharmaceutical closure	Infanrix	DTaP	Tip caps of prefilled syringes contain natural rubber latex
Latex	Pharmaceutical closure	Kinrix	DTaP+IPV	Tip caps of prefilled syringes contain natural rubber latex
Latex	Pharmaceutical closure	Pediarix	DTaP+HepB+IPV	Tip caps of prefilled syringes contain natural rubber latex
Latex	Pharmaceutical closure	Rotarix	Rotavirus	Tip caps of prefilled oral applicators contain natural rubber latex
Latex	Pharmaceutical closure	Tenivac	Td	Tip caps of prefilled syringes may contain natural rubber latex
Latex	Pharmaceutical closure	Twinrix	HepA+HepB	Tip caps of the prefilled syringes contain natural rubber latex
Neomycin	Antimicrobial	Fluad	Influenza	≤0.02 mcg
Neomycin	Antimicrobial	Fluad Quad	Influenza	≤0.02 mcg
Neomycin	Antimicrobial	Fluvirin	Influenza	≤2.5 mcg
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

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Neomycin	Antimicrobial	RabAvert	Rabies	<10 mcg/1 mL dose
Neomycin	Antimicrobial	Vaqta	HepA	<10 ppb (residual)
Neomycin	Antimicrobial	Varivax	Varicella	Trace amounts
Neomycin	Antimicrobial	Vaxelis	DTaP+IPV+HepB	<5 ng
Neomycin	Antimicrobial	Zostavax	Varicella Zoster	Trace amounts
Neomycin Sulfate	Antimicrobial	Afluria Quad	Influenza	≤81.8 ng
Neomycin Sulfate	Antimicrobial	Havrix	HepA	≤40 ng/mL
Neomycin Sulfate	Antimicrobial	Imovax	Rabies	<150 mcg/mL
Neomycin Sulfate	Antimicrobial	Priorix	MMR	≤25 mcg
Neomycin Sulfate	Antimicrobial	Twinrix	HepA+HepB	≤20 ng/mL
Polyethylene Glycol*	Lipid	Comirnaty (Pfizer)	COVID-19	0.05 mg 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide/0.3 mL dose
Polyethylene Glycol*	Lipid	Spikevax (Moderna)	COVID-19	1.93 mg (SM-102, polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG])
Polymyxin	Antimicrobial	Fluvirin	Influenza	≤3.75 mcg
Polymyxin B	Antimicrobial	Afluria Quad	Influenza	≤14 ng
Polymyxin B	Antimicrobial	IPOL	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
Polymyxin B Sulfate	Antimicrobial	Vaxelis	DTaP+IPV+HepB	<25 ng
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 20*	Surfactant	Vaxneuvance	Pneumococcal 15	1 mg
Polysorbate 80*	Surfactant	Boostrix	Tdap	≤100 mcg (Tween 80)
Polysorbate 80*	Surfactant	COVID-19 vaccine by Janssen*	COVID-19	0.16 mg
Polysorbate 80*	Surfactant	Fluad	Influenza	1.175 mg
Polysorbate 80*	Surfactant	Fluad Quad	Influenza	≤1500 1.175 mcg
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	Heplisav-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	Pevnar 13	Pneumococcal 13-valent	100 mcg
Polysorbate 80*	Surfactant	Pevnar 20	Pneumococcal 20-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
Polysorbate 80*	Surfactant	Trumenba	Meningococcal Group B	0.018 mg
Polysorbate 80*	Surfactant	Vaxelis	DTaP+IPV+HepB	<0.0056%
Sodium Taurodeoxycholate	Protein Purifier	Afluria Quad	Influenza	≤10 ppm (residual)
Streptomycin	Antimicrobial	IPOL	Polio	200 ng
Streptomycin sulfate	Manufacturing Residue	Vaxelis	DTaP+IPV+HepB	<200 ng
Thimerosal	Preservative	Afluria Quad	Influenza	24.5 mcg mercury only in multi-dose vial; none in single dose
Thimerosal	Preservative	Flucelvax 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	TDVax	Tetanus+Diphtheria	≤0.3 mcg mercury (trace amounts)
Yeast	Medium Nutrient	Engerix-B	HepB	≤5% yeast protein
Yeast	Medium Nutrient	Gardasil	HPV	<7 mcg yeast protein
Yeast	Medium Nutrient	Gardasil 9	HPV	<7 mcg yeast protein

\* possible cross reactivity between Polyethylene Glycol and Polysorbate

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Yeast	Medium Nutrient	Heplisav-B	HepB	Yeast protein: residual amounts (≤5.0% of total protein) Yeast DNA: <20 pg
Yeast	Medium Nutrient	Menveo	Meningococcal	Amount not specified in package insert
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	Prevnar 20	Pneumococcal 20-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	Vaxelis	DTaP+IPV+HepB	≤0.1 mcg
Yeast	Medium Nutrient	Vaxneuvance	Pneumococcal 15	Amount not specified in package insert
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](mailto:info@hopkinsvaccine.org)

This table was last updated on March 1, 2023 | © 2023 Institute for Vaccine Safety