Contributors:

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## Other sources (publications):

WCO:	HS classification reference for vaccines and related supplies and equipment
OECD:	Using trade to fight COVID-19: Manufacturing and distributing vaccines
Bown & Rogers:	The US did not ban exports of vaccine supplies. But more help is needed
Evenett et al.:	The Covid-19 Vaccine Production Club - Simon J. Evenett
Innovation Council:	HS codes relevant to inputs for COVID-19 vaccines, therapeutics and diagnostics - Innovation Council

	ID	Category	Sub-category	Product	Additional information	Most likely HS2022 classification	Comments	Sources/Contributors
1	1. Va	accine manufacturing	1.1 Active ingredients	Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2				

				Of AstraZeneca	300241		Manufacturers' information, WCO, WTO
4	1. Vaccine manufacturing	1.2 Inactive ingredients	2[(polyethylene glycol)-2000]-N, N-ditetradecylacetamide	Of Pfizer-BioNTech	390729		Evenett et al., WTO
5	1. Vaccine manufacturing	1.2 Inactive ingredients	PEG2000-DMG: 1,2-dimyristoyl-rac-glycerol,methoxypolyethylene glycol	Of Moderna	390729		Evenett et al., WTO
6	1. Vaccine manufacturing	1.2 Inactive ingredients	1,2-distearoyl-sn-glycero-3-phosphocholine	Of Pfizer-BioNTech	292320		DEGOBLI VACOD, MahOfacturers' information,
7	1. Vaccine manufacturing	1.2 Inactive ingredients	SM-102: heptadecane-9-84((2-hydroxyethyl)[6-oxo-6-(undecyloxy) hexyl) amino)	Of Moderna	292250		DECENT VIGO. ManOfacturers' information.
-			octanoate				
8	1. Vaccine manufacturing	1.2 Inactive ingredients	(4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)	Of Pfizer-BioNTech and Moderna	292250		Manufacturers' information, WCO, WTO
9	1. Vaccine manufacturing	1.2 Inactive ingredients	Cholesterol	Of Pfizer-BioNTech and Moderna	290613		Evenett et al., OECD, WCO, WTO
10	1. Vaccine manufacturing	1.2 Inactive ingredients	Sodium chloride	OstPaizen-BiaNTech, Janssen and	250100		Evenett et al., OECD, WCO, WTO
11	1. Vaccine manufacturing	1.2 Inactive ingredients	Monobasic potassium phosphate	Of Pfizer-BioNTech	283524		OECD, WCO, WTO
12	1. Vaccine manufacturing	1.2 Inactive ingredients	Potassium chloride	Of Pfizer-BioNTech	310420		OECD, WCO, WTO
13	1. Vaccine manufacturing	1.2 Inactive ingredients	Dibasic sodium phosphate dihydrate	Of Pfizer-BiPolysorbate-80		Of Janssen and AstraZeneca	340242

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24	1. Vaccine manufacturing	1.2 Inactive ingredients	Sodium hydroxide, solid	Of Janssen	281511		OECD, WCO, WTO
25	<ol> <li>Vaccine manufacturing</li> </ol>	1.2 Inactive ingredients	Sodium hydroxide, in aqueous solution (soda lye or liquid soda)	Of Janssen	281512		OECD, WCO, WTO
26	1. Vaccine manufacturing	1.2 Inactive ingredients	Hydrochloric acid	Of Janssen	280610		OECD, WCO, WTO
27	<ol> <li>Vaccine manufacturing</li> </ol>	1.2 Inactive ingredients	L-Histidine; L-Histidine hydrochloride monohydrate	Of AstraZeneca	293329		Evenett et al., OECD, WCO, WTO
28	<ol> <li>Vaccine manufacturing</li> </ol>	1.2 Inactive ingredients	Magnesium chloride hexahydrate	Of AstraZeneca	282731		Evenett et al., OECD, WCO, WTO
29	1. Vaccine manufacturing	1.2 Inactive ingredients	Disodium edetate dihydrate	Of AstraZeneca	292249		Evenett et al., OECD, WCO, WTO
30	1. Vaccine manufacturing	1.3 Other ingredients	Thimerosal	Preservatives - to prevent contamination	285210		OECD, WCO
31	1. Vaccine manufacturing	1.3 Other ingredients	Aluminium salts (alum)	Adjuvants - to help stimulate a stronge immune response	283330		OECD, WCO
32	1. Vaccine manufacturing	1.3 Other ingredients	Sorbitol	Stabilizers - to keep the vaccine poten during transportation and storage	290544		Bown & Rogers, OECD, WCO, WTO
33	1. Vaccine manufacturing	1.3 Other ingredients	Formaldehyde	Inactivating ingredients - to kill viruses or inactivate toxins	291211		OECD, WCO
34	1. Vaccine manufacturing	1.3 Other ingredients	Neomycin	Antibiotics - to prevent contamination by bacteria	294190		Bown & Rogers, OECD, WCO, WTO
35	1. Vaccine manufacturing	1.3 Other ingredients	Potassium chloridein bulk)		310420	Note 4 (ii) to Chapter 31 directs	Evenett et al., WCO
36	1. Vaccine manufacturing	1.3 Other ingredients	Monobasic potassium phosphate		283524	Assumed pure. Hence separate chemically defined substance r specified in Notes 2 (a), 3 (a), 4 (a) or 5 to Chapter 31 and hence excluded by Note 1 (b) to Chapter 31.	
37	1. Vaccine manufacturing	1.3 Other ingredients	Enzymes used in vaccine research and development and in the vaccine manufac process	t Raw material for mRNA vaccines	350790		Bown & Rogers, Manufacturers' information, WCO, WTO
38	1. Vaccine manufacturing	1.3 Other ingredients	Gelatin	Excipients - For preservation,			

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57	1. Vaccine manufacturing	1.4 Consumables	Plastic bag with inbuilt filter for the sterile filtration, storage and transfer of biopharmaceutical fluids, of other polymers		392329		Bown & Rogers, WCO, WTO
58	1. Vaccine manufacturing	1.4 Consumables	Microporous plastic membrane materials incorporated in a housing		842129		CEPI, WCO, WTO
59	1. Vaccine manufacturing	1.4 Consumables	Filters for fluids or syringe filters or cassette filters		842129		Bown & Rogers, WCO, W, TM anufactuers' information
60	1. Vaccine manufacturing	1.4 Consumables	Filters and tubing, single-use assemblies consisting of plastic components that an in diverse bioprocessing steps	i	842129	Provided the essential character is that of a filter	CEPI, OECD, WCO, WTO
61	1. Vaccine manufacturing	1.4 Consumables	Single-use assemblies			More information is needed for more precise classification	CEPI, WTO
62	1. Vaccine manufacturing	1.4 Consumables		Key consumable in isolating biological		In case of natural polymers	Manufacturers' information
				particles/antigens necessary in COVID- 19 vaccine production	391390		

## ID Category Sub-category Product