Legend	
Green Boxes	Pistachio
Brown Boxes	Tree Nut Crop Group/Other Nuts/Nuts
Blue Boxes	For Australia's standard "All Other Foods except Animal Food Commodities" or "All Other Food"
Red Numbers	Those limits that are stricter than the U.S. tolerances
P	Indicates for Post-Harvest Use
R	Indicates a Regional Tolerance
T	Temporary MRL
N/A	Those chemicals that did not have a tolerance or were unable to be ascertained. These countries may also have a default MRL (SEE DEFAULT MRL TABLE)

Default MRL *(in parts per million)*	
EU	0.01
Canada	0.1
Japan	0.01
South Korea	0.01
Turkey	0.01
United Arab Emirates	0.01
Saudi Arabia	0.01

Maximum Residue Levels for Pistachios - 2019[1]

Top Export Markets[2]

(in parts per million)

Active Ingredient	Amount of Planted Acres Treated[3]	United States[4]	CODEX	Hong Kong	EU	Canada	China	Turkey	Saudi Arabia	Israel	Australia	Mexico	VietNam	UAE	Japan	South Korea
BIFENTHRIN	342,170	0.05	0.05	0.05	0.05	N/A	N/A	0.05	0.05	0.05	0.03	0.05	0.05	N/A	0.05	0.05
LAMBDA-CYHALOTHRIN	315,025	0.05	0.01	0.01	0.05	0.05	0.01	0.01	0.05	0.01	N/A	0.05	0.01	0.01	0.5	0.5
GLYPHOSATE, POTASSIUM SALT	270,022	1	N/A	1	0.1	N/A	N/A	N/A	0.1	N/A	0.2	1	N/A	0.1	1	N/A
SULFUR	196,598	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A
ASPERGILLUS FLAVUS STRAIN AF36	181,233	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A
CHLORANTRANILIPROLE	163,883	0.02	0.02	0.02	0.05	0.02	0.02	0.05	N/A	0.02	T0.05	0.02	0.02	0.02	0.02	0.02
OXYFLUORFEN	152,174	0.05	N/A	0.05	0.05	N/A	N/A	0.05	N/A	N/A	0.05	0.05	N/A	0.05	0.05	N/A
METHOXYFENOZIDE	125,371	0.1	N/A	0.1	0.1	0.1	N/A	0.1	N/A	0.1	0.03	0.1	0.1	0.1	0.1	0.09
SAFLUFENACIL	103,102	0.03	0.01	N/A	0.03	0.03	N/A	0.03	N/A	0.01	0.03	0.03	0.01	0.01	0.03	0.03
IMIDACLOPRID	102,884	0.05	N/A	0.05	0.05	0.05	N/A	0.05	N/A	0.01	0.05	0.05	0.01	0.01	0.04	N/A
FLUOPYRAM	98,563	0.05	0.04	N/A	0.05	0.05	N/A	0.05	N/A	0.04	0.05	0.05	0.04	0.04	0.05	0.04
GLUFOSINATE-AMMONIUM	89,372	0.1	0.1	0.1	0.1	0.1	N/A	0.1	N/A	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PARAQUAT DICHLORIDE	80,106	0.05	0.05	0.05	0.02	N/A	0.05	0.02	0.05	0.05	0.05	0.05	0.05	N/A	0.05	N/A
PERMETHRIN	77,156	0.1	0.05	0.05	0.05	N/A	0.05	0.05	0.05	0.05	0.05	0.1	0.05	N/A	0.05	N/A
GLYPHOSATE, ISOPROPYLAMINE SALT	74,011	1	N/A	1	0.1	N/A	N/A	N/A	0.1	N/A	0.2	1	N/A	0.1	1	1
TEBUCONAZOLE	61,662	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A	0.05	0.05	0.05	0.05	0.05	0.05	0.05
METCONAZOLE	60,843	0.04	N/A	0.04	0.05	0.04	N/A	0.05	N/A	N/A	N/A	0.04	N/A	0.05	0.04	N/A
TRIFLOXYSTROBIN	56,685	0.04	0.02	0.02	0.02	0.04	0.02	0.02	N/A	0.02	0.04	0.04	0.02	0.02	0.04	0.02
PENDIMETHALIN	56,288	0.1	N/A	N/A	0.05	N/A	N/A	0.05	N/A	0.05	0.05	0.1	N/A	0.05	0.05	N/A
RIMSULFURON	51,601	0.01	N/A	0.01	0.02	N/A	N/A	0.02	N/A	N/A	N/A	0.01	N/A	0.02	N/A	N/A
PYRIMETHANIL	49,734	0.2	N/A	0.2	0.2	0.2	N/A	0.2	N/A	N/A	0.1	0.2	N/A	0.2	0.2	N/A
PYRACLOSTROBIN	46,910	0.7	1	1	1	0.5	N/A	1	N/A	1	T1	0.7	1	1	1	0.7
SPINETORAM	44,201	0.1	0.01	0.01	0.05	0.02	0.01	0.05	N/A	0.01	0.02	0.1	0.01	0.01	0.1	N/A
PENTHIOPYRAD	39,242	0.06	0.05	N/A	0.05	0.06	N/A	0.05	N/A	0.05	0.1	0.06	0.05	0.05	0.06	0.05
BETA-CYFLUTHRIN	37,487	0.01	N/A	0.01	0.02	N/A	N/A	0.02	0.02	N/A	0.05	0.01	N/A	N/A	0.04	N/A
INDAZIFLAM	36,597	0.01	N/A	N/A	N/A	0.01	N/A	0.01	N/A	N/A	N/A	0.01	N/A	N/A	N/A	N/A
SPIROTETRAMAT	34,690	0.25	0.5	0.5	0.5	0.25	0.5	0.5	N/A	0.5	0.5	0.25	0.5	0.5	0.5	0.25
CYPRODINIL	31,906	0.1	N/A	0.1	0.02	0.1	N/A	0.02	N/A	N/A	T0.1	0.1	N/A	N/A	0.1	N/A
FLUXAPYROXAD	28,959	0.06	0.04	N/A	0.04	0.06	N/A	0.01	N/A	0.04	0.1	0.06	N/A	0.04	0.8	0.05
PYRAFLUFEN-ETHYL	28,437	0.01	N/A	N/A	0.02	N/A	N/A	0.02	N/A	N/A	N/A	0.01	N/A	0.02	0.02	N/A
(Z,Z)-11,13-HEXADECADIENAL	27,718	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
POLYOXIN D, ZINC SALT	25,188	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLUBENDIAMIDE	22,326	0.06	0.1	0.1	0.1	0.1	N/A	0.1	N/A	0.1	0.05	0.06	0.1	0.1	0.1	0.1
CARFENTRAZONE-ETHYL	21,889	N/A	N/A	0.1	0.01	N/A	N/A	0.01	N/A	N/A	0.05	N/A	N/A	0.01	0.08	N/A
BUPROFEZIN	21,879	0.05	N/A	0.05	0.05	0.05	N/A	0.05	N/A	N/A	0.05	0.05	N/A	0.05	0.05	0.05
FENPROPATHRIN	21,341	0.1	0.15	0.1	0.01	0.1	N/A	*0.01*	N/A	0.15	N/A	0.1	0.15	N/A	N/A	0.1
FLUMIOXAZIN	19,476	0.02	0.02	0.02	0.05	0.02	N/A	0.05	N/A	0.02	0.02	0.02	N/A	N/A	N/A	N/A
MINERAL OIL	19,097	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BOSCALID	17,859	0.7	1	1	1	0.7	N/A	1	N/A	1	T2	0.7	1	1	1	1
AZOXYSTROBIN	16,020	0.5	1	1	1	0.55	N/A	1	0.1	1	2	0.5	1	1	1	0.5
PENOXSULAM	15,438	0.01	N/A	0.01	0.01	N/A	N/A	0.01	N/A	N/A	N/A	0.01	N/A	N/A	0.01	N/A
(S)-CYPERMETHRIN	14,818	0.05	0.05	N/A	0.05	0.05	0.05	0.05	0.05	0.05	0.01	0.05	0.05	N/A	0.2	0.05
CARBARYL	14,314	0.1	1	1	0.02	10	N/A	0.02	1	1	N/A	0.1	1	N/A	1	T 0.5
ORYZALIN	14,195	0.05	N/A	0.05	0.01	N/A	N/A	N/A	N/A	N/A	0.1	0.05	N/A	N/A	0.08	N/A
DIFENOCONAZOLE	13,261	0.03	0.03	0.03	0.05	0.03	0.03	0.05	N/A	0.03	0.02	0.03	0.03	0.03	0.03	N/A
CLETHODIM	11,100	0.2	N/A	N/A	0.1	N/A	N/A	0.1	N/A	N/A	N/A	0.2	N/A	0.1	1	0.05
ACETAMIPRID	10,107	0.1	N/A	0.1	0.07	0.1	N/A	0.07	N/A	0.06	0.1	0.1	0.06	0.06	0.1	0.06
CYFLUTHRIN	9,099	0.01	N/A	N/A	0.02	N/A	N/A	0.02	0.02	N/A	0.05	0.01	N/A	N/A	0.04	N/A
PROPICONAZOLE	7,997	0.1	N/A	N/A	0.01	0.1	N/A	0.01	0.05	N/A	T0.2	0.1	N/A	0.01	0.05	N/A
2,4-D, DIMETHYLAMINE SALT	7,508	0.05	0.2	0.2	0.2	N/A	0.2	0.2	0.05	0.2	N/A	0.05	0.2	0.2	0.2	0.20
KAOLIN	6,341	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ISOXABEN	6,333	0.02	N/A	0.02	0.02	N/A	N/A	0.02	N/A	N/A	0.01	0.02	N/A	0.02	N/A	N/A
ABAMECTIN	5,917	0.01	0.005	0.01	0.01	0.01	N/A	0.01	0.02	0.005	N/A	0.01	N/A	0.005	0.01	N/A
CHLOROTHALONIL	4,895	0.2	0.3	N/A	0.01	N/A	N/A	0.01	0.01	0.3	T0.1	0.2	N/A	N/A	0.1	N/A
ACEPHATE	4,835	N/A	N/A	N/A	0.02	N/A	N/A	N/A	0.02	N/A	N/A	N/A	N/A	N/A	0.1	0.1
CHLOROPHACINONE	4,208	N/A	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PHOSMET	4,204	R 0.1	0.2	N/A	*2*	N/A	0.2	2	N/A	0.2	N/A	R 0.1	0.2	0.2	0.2	N/A
MESOTRIONE	4,192	0.01	N/A	N/A	0.01	N/A	N/A	0.01	N/A	N/A	N/A	0.01	N/A	0.01	N/A	N/A
POTASSIUM PHOSPHITE	3,929	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SETHOXYDIM	3,726	0.2	N/A	N/A	0.1	N/A	N/A	0.1	N/A	N/A	N/A	0.2	N/A	0.1	1	0.05
ZINC PHOSPHIDE[*P]	3,529	0.1	N/A	0.01	0.1	0.1	0.01	0.05	N/A	N/A	0.01	0.1	0.01	N/A	0.01	0.1
COPPER HYDROXIDE	2,844	Exempt	N/A	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A
BIFENAZATE	2,580	0.2	0.2	N/A	0.2	N/A	0.2	0.2	N/A	0.2	N/A	0.2	0.2	0.2	0.2	0.2
THIOPHANATE-METHYL	2,561	0.1	N/A	N/A	0.2	N/A	N/A	0.2	0.1	0.1	N/A	0.1	N/A	N/A	0.1	0.05
BACILLUS THURINGIENSIS (BERLINER), SUBSP. KURSTAKI, STRAIN SA-11	2,499	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ALUMINUM PHOSPHIDE[P]	2,473	0.1	0.01	0.01	0.1	0.1	0.01	0.05	N/A	N/A	0.01	0.1	0.01	N/A	0.01	0.1
EMAMECTIN BENZOATE	2,444	0.02	0.001	0.02	0.01	N/A	N/A	0.01	N/A	0.001	0.005	0.02	0.001	N/A	N/A	0.01
SPINOSAD	2,143	0.1	0.07	0.1	0.07	N/A	N/A	0.07	N/A	0.07	T0.01	0.1	0.07	0.07	0.07	N/A
PYRETHRINS	2,079	See Below	0.5	0.5	1	N/A	N/A	N/A	1	N/A	1	N/A	N/A	N/A	1	1
FLAZASULFURON	2,065	0.01	N/A	N/A	0.01	N/A	N/A	0.01	N/A	N/A	N/A	0.01	N/A	0.01	0.02	N/A
FENHEXAMID	1,792	0.02	N/A	0.02	0.02	N/A	N/A	0.02	N/A	N/A	N/A	0.02	N/A	0.02	0.02	N/A
FLUPYRADIFURONE	1,550	0.02	N/A	N/A	0.01	0.02	N/A	0.01	N/A	N/A	0.02	0.02	N/A	0.01	0.02	0.02
DIPHACINONE	1,333	N/A	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STRYCHNINE	1,179	N/A	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CHLORINE	1,176	Exempt	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
REYNOUTRIA SACHALINENSIS	1,073	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLUAZIFOP-P-BUTYL	1,021	N/A	N/A	N/A	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HALOSULFURON-METHYL	995	0.05	N/A	0.05	0.01	0.05	N/A	0.01	N/A	N/A	N/A	0.05	N/A	0.01	0.05	N/A
PYRIPROXYFEN	988	0.02	N/A	0.02	0.05	N/A	N/A	0.05	N/A	N/A	0.1	0.02	N/A	0.05	0.02	0.01
FENPYROXIMATE	980	0.1	0.05	0.05	0.01	0.1	0.05	0.05	N/A	0.05	0.1	0.1	0.05	0.05	0.05	0.05
BACILLUS THURINGIENSIS (BERLINER), SUBSP. AIZAWAI, GC-91 PROTEIN	628	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CYFLUMETOFEN	600	0.01	0.01	N/A	0.01	0.01	N/A	0.01	N/A	0.01	0.01	0.01	0.01	0.01	0.01	N/A
BACILLUS THURINGIENSIS SUBSPECIES KURSTAKI, GENETICALLY ENGINEERED STRAIN EG7841 LEPIDOPTERAN ACTIVE TOXIN	470	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ETOXAZOLE	302	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A	0.01	0.05	0.01	0.01	0.01	0.01	N/A
SULFENTRAZONE	288	0.15	N/A	N/A	N/A	0.15	N/A	0.01	N/A	N/A	N/A	0.15	N/A	N/A	0.05	N/A
PETROLEUM OIL, UNCLASSIFIED	222	Exempt	N/A	N/A	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ACEQUINOCYL	170	0.02	N/A	0.02	0.01	0.02	N/A	0.01	N/A	N/A	N/A	0.02	N/A	0.01	0.02	0.01
BACILLUS AMYLOLIQUEFACIENS STRA	156	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PRODIAMINE	155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
METAFLUMIZONE	143	0.04	N/A	N/A	0.05	N/A	N/A	0.05	N/A	N/A	0.04	0.04	N/A	0.05	N/A	N/A
HEXYTHIAZOX	141	0.3	0.05	0.05	0.5	0.02	0.05	0.5	N/A	0.05	0.05	0.3	0.05	0.05	0.05	0.02
2,4-D	141	0.05	0.20	0.2	0.20	N/A	0.2	0.2	0.05	0.2	N/A	0.05	0.2	0.2	0.2	0.20
Chemicals Quantified in Units Other than Acreage	**Amount of Chemical Used with Unit of Measurement**	**United States[4]**	**CODEX**	**Hong Kong**	**EU**	**Canada**	**China**	**Turkey**	**Saudi Arabia**	**Israel**	**Australia**	**Mexico**	**VietNam**	**UAE**	**Japan**	**South Korea**
METHYL BROMIDE[P]	871 tons	200	10	N/A	50	N/A	N/A	50	0.05	N/A	15	200	N/A	N/A	200	50
PHOSPHINE[P]	31,947 tons	0.1	0.01	0.01	0.1	0.1	0.01	0.05	N/A	0.01	0.01	0.1	0.01	N/A	0.01	0.1
SULFURYL FLUORIDE[P]	836,092 cubic ft	3	3	3	10	0.3	3	10	N/A	3	7	3	3	N/A	3	0.8

Preprared by: Schramm, Williams & Associates, Inc. (January 2019)

[1] **The limits and standards reported in this document are intended for informational purposes only. These standards and limits are subject to change by the National governments' standard setting body. Refer to export market's standard setting body and regulations for official information.**

[2] Country use determined by the APG World Pistachio Trade Report 2018, Top Export Markets.

[3] Source: California Department of Pesticide Regulation, CAL-PIP database, 2016 crop data. Any chemical/active ingredient applied to less than 125 acres not included in database.

* Many countries interchange phosphine and phosphide. The U.S. residue definition states, "Tolerances are established for residues of phosphine in or on the following raw agricultural commodities (RACs) resulting from post-harvest fumigation for the control of insects with phosphine gas or phosphide compounds that produce

** Sources: U.S tolerances: 40 CFR 180; Codex MRL: Codex Alimentarius Pesticide Index; European Union: EU Pesticides Database; Hong Kong:Hong Kong Pesticide MRL Database - Centre for Food Safety; Canada: Maximum Residue Limits Database - Health Canada; China: National Food Safety Standard-Maximum Residue Limits for Pesticides in Food (GB 2763-2014)-National Health and Family Planning Commission; Australia:COMLaw, Agricultural and Veterinary Chemicals Code Instrument No. 4 (MRL Standard) 2012, Updated November 29, 2017; Japan: The Food Chemical Research Foundation Database. Other countries whose MRL information not accessible or in English sourced through the FAS International MRL Databse; USDA.

Pyrethrins - The U.S. maintains an exemption of a tolerance for the use of pyrethrins when it is applied during the growing of a crop; it is not exempt of a tolerance when it is used at the time of or after harvest. A tolerance of 1.0 ppm is established for residues of the insecticide pyrethrins in or on all food items in food handling establishments where food and food products are held, processed, prepared and/or served. Food must be removed or covered prior to use.