

# CHIRON

ORGANOTIN REFERENCE MATERIALS

ENVIRONMENTAL

## Advance Environmental Health & Safety with Organotin Testing

Organotins, also known as tin organics and stannanes, are organic compounds widely used in a variety of applications, including anti-fouling paints, agricultural biocides and industrial processes. They are typically found in sealants, adhesives, food packaging, plastic pipes, pesticides and paints.

Due to its toxicity to human health and persistence in the environment, testing organotin has become critical. We offer the broadest, most unique portfolio of organotin reference materials to assist you.

### Organotin Reference Materials:

- Suitable for use with EPA Method 8323
- Neat substances
- Single compound solutions and mixes
- Custom capabilities
- Isotopically labelled internal standards



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## Tin Chlorides, Tetraalkyl Tin and Tetraphenyl Tins

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
10202.1-K-ME	Methyltin trichloride (≥98%)	Trichloromethylstannane	993-16-8	1000 µg/mL	Methanol
10202.1-100MG	Methyltin trichloride (≥98%)	Trichloromethylstannane	993-16-8	neat	Neat
13607.2-K-ME	Dimethyltin dichloride, Purified (≥98%)	Dichlorodimethylstannane	753-73-1	1000 µg/mL	Methanol
13607.2-100MG	Dimethyltin dichloride, Purified (≥98%)	Dichlorodimethylstannane	753-73-1	neat	Neat
13608.3-K-ME	Trimethyltin chloride, Purified (≥98%)	Trimethylchlorostannane	1066-45-1	1000 µg/mL	Methanol
13608.3-100MG	Trimethyltin chloride, Purified (≥98%)	Trimethylchlorostannane	1066-45-1	neat	Neat
10574.6-100MG	Triethyltin chloride	Triethylchlorostannane	994-31-0	neat	Neat
13609.6-100MG	Triethyltin chloride, Purified (≥98%)	Triethylchlorostannane	994-31-0	neat	Neat
10080.6-100MG	Di-n-propyltin dichloride	Dichlorodipropylstannane	867-36-7	neat	Neat
13610.6-K-ME	Di-n-propyltin dichloride, Purified (≥98%)	Dichlorodipropylstannane	867-36-7	1000 µg/mL	Methanol
13610.6-100MG	Di-n-propyltin dichloride, Purified (≥98%)	Dichlorodipropylstannane	867-36-7	neat	Neat
1989.9-K-ME	Tri-n-propyltin chloride	Tripropylchlorostannane	2279-76-7	1000 µg/mL	Methanol
1989.9-100MG	Tri-n-propyltin chloride	Tripropylchlorostannane	2279-76-7	neat	Neat
13620.9-K-ME	Tri-n-propyltin chloride, Purified (≥98%)	Tripropylchlorostannane	2279-76-7	1000 µg/mL	Methanol
13620.9-100MG	Tri-n-propyltin chloride, Purified (≥98%)	Tripropylchlorostannane	2279-76-7	neat	Neat
2490.12-K-IO	Tetra-n-propyltin	Tetrapropylstannane	2176-98-9	1000 µg/mL	Isooctane
2490.12-100MG	Tetra-n-propyltin	Tetrapropylstannane	2176-98-9	neat	Neat
13611.4-K-ME	Mono-n-butyltin trichloride (≥98%)	Trichlorobutylstannane	1118-46-3	1000 µg/mL	Methanol
13611.4-100MG	Mono-n-butyltin trichloride (≥98%)	Trichlorobutylstannane	1118-46-3	neat	Neat
13612.8-K-ME	Di-n-butyltin dichloride, Purified (≥98%)	Dichlorodibutylstannane	683-18-1	1000 µg/mL	Methanol
13612.8-100MG	Di-n-butyltin dichloride, Purified (≥98%)	Dichlorodibutylstannane	683-18-1	neat	Neat
1981.12-K-ME	Tri-n-butyltin chloride	Tributylchlorostannane	1461-22-9	1000 µg/mL	Methanol
1981.12-K-5ME	Tri-n-butyltin chloride	Tributylchlorostannane	1461-22-9	1000 µg/mL	Methanol
1981.12-100MG	Tri-n-butyltin chloride	Tributylchlorostannane	1461-22-9	neat	Neat
13613.12-K-ME	Tri-n-butyltin chloride, Purified (≥98%)	Tributylchlorostannane	1461-22-9	1000 µg/mL	Methanol
13613.12-K-MEx5	Tri-n-butyltin chloride, Purified (≥98%)	Tributylchlorostannane	1461-22-9	1000 µg/mL	Methanol

13613.12-K-5ME	Tri-n-butyltin chloride, Purified (≥98%)	Tributylchlorostannane	1461-22-9	1000 µg/mL	Methanol
13613.12-100MG	Tri-n-butyltin chloride, Purified (≥98%)	Tributylchlorostannane	1461-22-9	neat	Neat
10591.12-100MG	Tri-n-butyltin hydride	Tributylstannane	688-73-3	neat	Neat
2497.16-K-IO	Tetra-n-butyltin	Tetrabutylstannane	1461-25-2	1000 µg/mL	Isooctane
2497.16-100MG	Tetra-n-butyltin	Tetrabutylstannane	1461-25-2	neat	Neat
2050.15-K-ME	Tri-n-pentyltin chloride	Trichloropentylstannane	3342-67-4	1000 µg/mL	Methanol
2050.15-100MG	Tri-n-pentyltin chloride	Trichloropentylstannane	3342-67-4	neat	Neat
13622.15-K-ME	Tri-n-pentyltin chloride, Purified (≥98%)	Trichloropentylstannane	3342-67-4	1000 µg/mL	Methanol
13622.15-100MG	Tri-n-pentyltin chloride, Purified (≥98%)	Trichloropentylstannane	3342-67-4	neat	Neat
3956.20-K-IO	Tetra-n-pentyltin	Tetrapentylstannane	3765-65-9	1000 µg/mL	Isooctane
3956.20-100MG	Tetra-n-pentyltin	Tetrapentylstannane	3765-65-9	neat	Neat
2495.7-K-ME	Mono-n-heptyltin trichloride	Trichloroheptylstannane	59344-47-7	1000 µg/mL	Methanol
2495.7-10MG	Mono-n-heptyltin trichloride	Trichloroheptylstannane	59344-47-7	neat	Neat
2495.7-100MG	Mono-n-heptyltin trichloride	Trichloroheptylstannane	59344-47-7	neat	Neat
13625.14-K-ME	Di-n-heptyltin dichloride, Purified (≥98%)	Dichlorodiheptylstannane	74340-12-8	1000 µg/mL	Methanol
13625.14-10MG	Di-n-heptyltin dichloride, Purified (≥98%)	Dichlorodiheptylstannane	74340-12-8	neat	Neat
13625.14-100MG	Di-n-heptyltin dichloride, Purified (≥98%)	Dichlorodiheptylstannane	74340-12-8	neat	Neat
13616.8-K-IO	Mono-n-octyltin trichloride, Purified (≥98%)	Trichlorooctylstannane	3091-25-6	1000 µg/mL	Isooctane
13616.8-K-ME	Mono-n-octyltin trichloride, Purified (≥98%)	Trichlorooctylstannane	3091-25-6	1000 µg/mL	Methanol
13616.8-100MG	Mono-n-octyltin trichloride, Purified (≥98%)	Trichlorooctylstannane	3091-25-6	neat	Neat
2488.16-K-IO	Di-n-octyltin dichloride	Dichlorodioctylstannane	3542-36-7	1000 µg/mL	Isooctane
2488.16-K-ME	Di-n-octyltin dichloride	Dichlorodioctylstannane	3542-36-7	1000 µg/mL	Methanol
2488.16-100MG	Di-n-octyltin dichloride	Dichlorodioctylstannane	3542-36-7	neat	Neat
13617.16-K-ME	Di-n-octyltin dichloride, Purified (≥98%)	Dichlorodioctylstannane	3542-36-7	1000 µg/mL	Methanol
13617.16-100MG	Di-n-octyltin dichloride, Purified (≥98%)	Dichlorodioctylstannane	3542-36-7	neat	Neat
2695.24-K-5ME	Tri-n-octyltin chloride	Trioctylchlorostannane	2587-76-0	1000 µg/mL	Methanol
2695.24-100MG	Tri-n-octyltin chloride	Trioctylchlorostannane	2587-76-0	neat	Neat

13618.24-K-5ME	Tri-n-octyltin chloride, Purified ( $\geq 98\%$ )	Trioctylchlorostannane	2587-76-0	1000 $\mu\text{g}/\text{mL}$	Methanol
13618.24-100MG	Tri-n-octyltin chloride, Purified ( $\geq 98\%$ )	Trioctylchlorostannane	2587-76-0	neat	Neat
10342.32-100MG	Tetraoctyltin	Tetraoctylstannane	3590-84-9	neat	Neat
1987.6-K-IO	Monophenyltin trichloride	Trichlorophenylstannane	1124-19-2	1000 $\mu\text{g}/\text{mL}$	Isooctane
1987.6-K-ME	Monophenyltin trichloride	Trichlorophenylstannane	1124-19-2	1000 $\mu\text{g}/\text{mL}$	Methanol
1987.6-K-5ME	Monophenyltin trichloride	Trichlorophenylstannane	1124-19-2	1000 $\mu\text{g}/\text{mL}$	Methanol
1987.6-100MG	Monophenyltin trichloride	Trichlorophenylstannane	1124-19-2	neat	Neat
13626.6-K-ME	Monophenyltin trichloride, Purified ( $\geq 98\%$ )	Trichlorophenylstannane	1124-19-2	1000 $\mu\text{g}/\text{mL}$	Methanol
13626.6-100MG	Monophenyltin trichloride, Purified ( $\geq 98\%$ )	Trichlorophenylstannane	1124-19-2	neat	Neat
13627.12-K-ME	Diphenyltin dichloride, Purified ( $\geq 98\%$ )	Dichlorodiphenylstannane	1135-99-5	1000 $\mu\text{g}/\text{mL}$	Methanol
13627.12-100MG	Diphenyltin dichloride, Purified ( $\geq 98\%$ )	Dichlorodiphenylstannane	1135-99-5	neat	Neat
13628.18-K-MEx5	Triphenyltin chloride, Purified ( $\geq 98\%$ )	Triphenylchlorostannane	639-58-7	1000 $\mu\text{g}/\text{mL}$	Methanol
13628.18-K-5ME	Triphenyltin chloride, Purified ( $\geq 98\%$ )	Triphenylchlorostannane	639-58-7	1000 $\mu\text{g}/\text{mL}$	Methanol
13628.18-100MG	Triphenyltin chloride, Purified ( $\geq 98\%$ )	Triphenylchlorostannane	639-58-7	neat	Neat
9692.24-10MG	Tetraphenyltin	Tetraphenylstannane	595-90-4	neat	Neat
9692.24-100MG	Tetraphenyltin	Tetraphenylstannane	595-90-4	neat	Neat
2489.18-500-ME	Tricyclohexyltin chloride	Tricyclohexylchlorostannane	3091-32-5	500 $\mu\text{g}/\text{mL}$	Methanol
2489.18-100MG	Tricyclohexyltin chloride	Tricyclohexylchlorostannane	3091-32-5	neat	Neat
13630.18-K-ME	Tricyclohexyltin chloride, Purified ( $\geq 98\%$ )	Tricyclohexylchlorostannane	3091-32-5	1000 $\mu\text{g}/\text{mL}$	Methanol
13630.18-100MG	Tricyclohexyltin chloride, Purified ( $\geq 98\%$ )	Tricyclohexylchlorostannane	3091-32-5	neat	Neat

## Deuterated Internal Standards

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
8554.12-K-IO	Tetra-n-propyltin-d7 (mono-n-propyl-d7)	Tetrapropylstannane-d7 (mono-n-propyl-d7)	n/a	1000 µg/mL	Isooctane
10299.16-K-IO	Tetra-n-butyltin-d36	Tetrabutylstannane-d36 (butyl-d9)	358731-92-7	1000 µg/mL	Isooctane
10299.16-K-ME	Tetra-n-butyltin-d36	Tetrabutylstannane-d36 (butyl-d9)	358731-92-7	1000 µg/mL	Methanol
9126.4-K-IO	Mono-n-butyltin-d9 trichloride	Trichlorobutylstannane-d9	1118-46-3 (unlabelled)	1000 µg/mL	Isooctane
9126.4-K-ME	Mono-n-butyltin-d9 trichloride	Trichlorobutylstannane-d9	1118-46-3 (unlabelled)	1000 µg/mL	Methanol
9127.12-K-IO	Tri-n-butyltin-d27 chloride	Tributylchlorostannane-d27	1257647-76-9	1000 µg/mL	Isooctane
9127.12-K-ME	Tri-n-butyltin-d27 chloride	Tributylchlorostannane-d27	1257647-76-9	1000 µg/mL	Methanol
9129.6-K-IO	Monophenyltin-d5 trichloride	Trichlorophenylstannane-d5	1124-19-2 (unlabelled)	1000 µg/mL	Isooctane
9129.6-K-ME	Monophenyltin-d5 trichloride	Trichlorophenylstannane-d5	1124-19-2 (unlabelled)	1000 µg/mL	Methanol
9128.18-100-ME	Triphenyltin-d15 chloride	Triphenylchlorostannane-d15 (phenyl-d5)	358731-94-9	100 µg/mL	Methanol
9128.18-K-IO	Triphenyltin-d15 chloride	Triphenylchlorostannane-d15 (phenyl-d5)	358731-94-9	1000 µg/mL	Isooctane
12487.8-K-IO	Dibutyltin-d18 dichloride	Dichlorodibutylstannane-d18	683-18-1 (unlabelled)	1000 µg/mL	Isooctane
12487.8-K-ME	Dibutyltin-d18 dichloride	Dichlorodibutylstannane-d18	683-18-1 (unlabelled)	1000 µg/mL	Methanol

## Ethyl and Methyl Derivatives

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
12213.8-K-IO	Tetraethyltin	Tetraethylstannane	597-64-8	1000 µg/mL	Isooctane
2119.10-K-IO	Mono-n-butyltriethyltin	Butyltriethylstannane	17582-53-5	1000 µg/mL	Isooctane
2120.12-K-IO	Di-n-butyl-diethyltin	Dibutyl-diethylstannane	20525-62-6	1000 µg/mL	Isooctane
1886.14-K-IO	Ethyltri-n-butyltin	Tributylethylstannane	19411-60-0	1000 µg/mL	Isooctane
1886.14-2K-IO	Ethyltri-n-butyltin	Tributylethylstannane	19411-60-0	2000 µg/mL	Isooctane
2492.14-K-IO	Mono-n-octyltriethyltin	Triethyloctylstannane	16216-27-6	1000 µg/mL	Isooctane
2491.20-K-IO	Di-n-octyl-diethyltin	Diethyldioctylstannane	14775-13-4	1000 µg/mL	Isooctane
8553.26-K-IO	Ethyltri-n-octyltin	Trioctylethylstannane	n/a	1000 µg/mL	Isooctane
2498.20-K-IO	Ethyltricyclohexyltin	Tricyclohexylethylstannane	106376-80-1	1000 µg/mL	Isooctane
2118.12-K-IO	Monophenyltriethyltin	Triethylphenylstannane	878-51-3	1000 µg/mL	Isooctane
2117.16-K-IO	Diphenyl-diethyltin	Diethyldiphenylstannane	10203-52-8	1000 µg/mL	Isooctane
1887.20-K-IO	Ethyltriphenyltin	Ethyltriphenylstannane	5424-25-9	1000 µg/mL	Isooctane
1887.20-2K-IO	Ethyltriphenyltin	Ethyltriphenylstannane	5424-25-9	2000 µg/mL	Isooctane
10177.19-K-IO	Methyltriphenyltin	Methyltriphenylstannane	1089-59-4	1000 µg/mL	Isooctane

## Native Ethyl Derivative Internal Standards

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
1955.11-K-IO	Ethyltri-n-propyltin	Ethyltripropylstannane	3440-79-7	1000 µg/mL	Isooctane
1955.11-2K-ME	Ethyltri-n-propyltin	Ethyltripropylstannane	3440-79-7	2000 µg/mL	Methanol
2049.17-K-IO	Ethyltri-n-pentyltin	Ethyltripentylstannane	198958-44-0	1000 µg/mL	Isooctane
2494.13-K-IO	Mono-n-heptyltriethyltin	Ethyltripentylstannane	51283-39-7	1000 µg/mL	Isooctane
2493.18-K-IO	Di-n-heptyl-diethyltin	Diethyldiheptylstannane	165900-80-1	1000 µg/mL	Isooctane

## Deuterated Ethyl Derivative Internal Standards

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
9229.10-100-IO	Mono-n-butyltriethyltin-d9 (mono-n-butyl-d9)	Butyltriethylstannane-d9 (mono-n-butyl-d9)	n/a	100 µg/mL	Isooctane
9230.14-100-IO	Ethyltri-n-butyltin-d27 (tri-n-butyl-d27)	Tributylethylstannane-d27 (tri-n-butyl-d27)	n/a	100 µg/mL	Isooctane
9231.12-100-IO	Monophenyltriethyltin-d5 (phenyl-d5)	Triethylphenylstannane-d5 (phenyl-d5)	n/a	100 µg/mL	Isooctane
9232.20-100-IO	Ethyltriphenyltin-d15 (triphenyl-d15)	Ethyltriphenylstannane-d15 (triphenyl-d15)	n/a	100 µg/mL	Isooctane

## Other Organotin Compounds with Mixed Alkyl-Aryl Group

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
10928.17-K-IO	n-Pentyltri-n-butyltin	Tributylpentylstannane	78693-51-3	1000 µg/mL	Isooctane
10929.18-K-IO	Di-n-butyl-di-n-pentyltin	Dibutyldipentylstannane	78693-52-4	1000 µg/mL	Isooctane
10930.19-K-IO	n-Butyltri-n-pentyltin	Butyltripentylstannane	78693-53-5	1000 µg/mL	Isooctane
10931.23-K-IO	n-Pentyltriphenyltin	Pentyltriphenylstannane	1802-51-3	1000 µg/mL	Isooctane
10932.14-K-IO	n-Pentyltri-n-propyltin	Pentyltripropylstannane	148162-37-2	1000 µg/mL	Isooctane
11490.22-K-IO	Di-n-pentyl-diphenyltin	Dipentyl-diphenylstannane	23396-45-4	1000 µg/mL	Isooctane
11498.21-K-IO	Phenyltri-n-pentyltin	Tripentylphenylstannane	24319-45-7	1000 µg/mL	Isooctane

## DOTE and MOTE

Part No.	Product Name	Synonym	CAS No.	Concentration	Matrix
11002.36-10MG	DOTE	Di-octyltin bis(2-ethylhexyl mercaptoacetate; Bis(carboxymethylthio)dioctylstannylene	15571-58-1	neat	Neat
11003.38-10MG	MOTE	Mono-octyltin tris(2-ethylhexyl mercaptoacetate; Octyltris(2-ethylhexyloxycarbonylmethylthio)stannane	27107-89-7	neat	Neat

**Key**

- OC - Organotin cation - compound without chlorides
- OTC - Organotin compound - whole compound including chlorides

Part No.	Product Name	Composition [CAS No.]	No. Compounds	Concentration	Matrix	Volume
S-4335B-K-ME	Organotin Standard Mixture 1B	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1987.6 Mono phenyltin trichloride [1124-19-2] 1981.12 Tri-n-butyltin chloride [1461-22-9] 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 13627.12 Diphenyltin dichloride, Purified (>98%) [1135-99-5]	6	1000 µg/mL	Methanol	1 mL
S-4335B-K-MEx5	Organotin Standard Mixture 1B	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1987.6 Mono phenyltin trichloride [1124-19-2] 1981.12 Tri-n-butyltin chloride [1461-22-9] 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 13627.12 Diphenyltin dichloride, Purified (>98%) [1135-99-5]	6	1000 µg/mL	Methanol	5 mL
S-4380B-K-ME	ISO 17353/23161 Multicomponent OC Standard Stock Solution A	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 1.6 mg/mL (OTC) 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1.3 mg/mL (OTC) 1981.12 Tri-n-butyltin chloride [1461-22-9] 1.1 mg/mL (OTC) 2497.16 Tetra-n-butyltin [1461-25-2] 1.0 mg/mL (OTC) 13616.8 Mono-n-octyltin trichloride, Purified (≥98%) [3091-25-6] 1.5 mg/mL (OTC) 2488.16 Di-n-octyltin dichloride [3542-36-7] 1.2 mg/mL (OTC) 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 1.1 mg/mL (OTC) 2489.18 Tricyclohexyltin chloride [3091-32-5] 1.1 mg/mL (OTC)	8	1000 µg/mL OC	Methanol	1 mL



Part No.	Product Name	Composition [CAS No.]	No. Compounds	Concentration	Matrix	Volume
S-4380B-K-MEx5	ISO 17353/23161 Multicomponent OC Standard Stock Solution A	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 1.6 mg/mL (OTC) 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1.3 mg/mL (OTC) 1981.12 Tri-n-butyltin chloride [1461-22-9] 1.1 mg/mL (OTC) 2497.16 Tetra-n-butyltin [1461-25-2] 1.0 mg/mL (OTC) 13616.8 Mono-n-octyltin trichloride, Purified (≥98%) [3091-25-6] 1.5 mg/mL (OTC) 2488.16 Di-n-octyltin dichloride [3542-36-7] 1.2 mg/mL (OTC) 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 1.1 mg/mL (OTC) 2489.18 Tricyclohexyltin chloride [3091-32-5] 1.1 mg/mL (OTC)	8	1000 µg/mL OC	Methanol	5 mL
S-4380B-K-5ME	ISO 17353/23161 Multicomponent OC Standard Stock Solution A	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 1.6 mg/mL (OTC) 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1.3 mg/mL (OTC) 1981.12 Tri-n-butyltin chloride [1461-22-9] 1.1 mg/mL (OTC) 2497.16 Tetra-n-butyltin [1461-25-2] 1.0 mg/mL (OTC) 13616.8 Mono-n-octyltin trichloride, Purified (≥98%) [3091-25-6] 1.5 mg/mL (OTC) 2488.16 Di-n-octyltin dichloride [3542-36-7] 1.2 mg/mL (OTC) 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 1.1 mg/mL (OTC) 2489.18 Tricyclohexyltin chloride [3091-32-5] 1.1 mg/mL (OTC)	8	1000 µg/mL OC	Methanol	5 mL
S-4381C-K-ME	ISO 17353/23161 Internal Standard OC, Stock Solution B	13625.14 Di-n-heptyltin dichloride, Purified (>98%) [74340-12-8] 1224 µg/mL (OTC) 2495.7 Mono-n-heptyltin trichloride [59344-47-7] 1488 µg/mL (OTC) 13620.9 Tri-n-propyltin chloride, Purified (≥98%) [2279-76-7] 1143 µg/mL (OTC) 2490.12 Tetra-n-propyltin [2176-98-9] 1000 µg/mL (OTC)	4	1000 µg/mL OC	Methanol	1 mL
S-4381C-K-MEx5	ISO 17353/23161 Internal Standard OC, Stock Solution B	13625.14 Di-n-heptyltin dichloride, Purified (>98%) [74340-12-8] 1224 µg/mL (OTC) 2495.7 Mono-n-heptyltin trichloride [59344-47-7] 1488 µg/mL (OTC) 13620.9 Tri-n-propyltin chloride, Purified (≥98%) [2279-76-7] 1143 µg/mL (OTC) 2490.12 Tetra-n-propyltin [2176-98-9] 1000 µg/mL (OTC)	4	1000 µg/mL OC	Methanol	5 mL

Part No.	Product Name	Composition [CAS No.]	No. Compounds	Concentration	Matrix	Volume
S-4381C-K-5ME	ISO 17353/23161 Internal Standard OC, Stock Solution B	13625.14 Di-n-heptyltin dichloride, Purified (>98%) [74340-12-8] 1224 µg/mL (OTC) 2495.7 Mono-n-heptyltin trichloride [59344-47-7] 1488 µg/mL (OTC) 13620.9 Tri-n-propyltin chloride, Purified (≥98%) [2279-76-7] 1143 µg/mL (OTC) 2490.12 Tetra-n-propyltin [2176-98-9] 1000 µg/mL (OTC)	4	1000 µg/mL OC	Methanol	5 mL
S-4525B-K-ME	Organotin Standard Mixture 6B - Tin chlorides	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1981.12 Tri-n-butyltin chloride [1461-22-9] 1987.6 Monophenyltin trichloride [1124-19-2] 13627.12 Diphenyltin dichloride, Purified (>98%) [1135-99-5] 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 13616.8 Mono-n-octyltin trichloride, Purified (≥98%) [3091-25-6] 2488.16 Di-n-octyltin dichloride [3542-36-7] 13618.24 Tri-n-octyltin chloride, Purified (≥98%) [2587-76-0] 2489.18 Tricyclohexyltin chloride [3091-32-5] 2497.16 Tetra-n-butyltin [1461-25-2]	11	1000 µg/mL	Methanol	1 mL
S-4525B-K-MEx5	Organotin Standard Mixture 6B - Tin chlorides	13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3] 13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1] 1981.12 Tri-n-butyltin chloride [1461-22-9] 1987.6 Monophenyltin trichloride [1124-19-2] 13627.12 Diphenyltin dichloride, Purified (>98%) [1135-99-5] 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7] 13616.8 Mono-n-octyltin trichloride, Purified (≥98%) [3091-25-6] 2488.16 Di-n-octyltin dichloride [3542-36-7] 13618.24 Tri-n-octyltin chloride, Purified (≥98%) [2587-76-0] 2489.18 Tricyclohexyltin chloride [3091-32-5] 2497.16 Tetra-n-butyltin [1461-25-2]	11	1000 µg/mL	Methanol	5 mL

Part No.	Product Name	Composition [CAS No.]	No. Compounds	Concentration	Matrix	Volume
S-4525B-500-ME	Organotin Standard Mixture 6B - Tin chlorides	<p>13611.4 Mono-n-butyltin trichloride (≥98%) [1118-46-3]</p> <p>13612.8 Di-n-butyltin dichloride, Purified (≥98%) [683-18-1]</p> <p>1981.12 Tri-n-butyltin chloride [1461-22-9]</p> <p>1987.6 Monophenyltin trichloride [1124-19-2]</p> <p>13627.12 Diphenyltin dichloride, Purified (&gt;98%) [1135-99-5]</p> <p>13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7]</p> <p>13616.8 Mono-n-octyltin trichloride, Purified (≥98%) [3091-25-6]</p> <p>2488.16 Di-n-octyltin dichloride [3542-36-7]</p> <p>13618.24 Tri-n-octyltin chloride, Purified (≥98%) [2587-76-0]</p> <p>2489.18 Tricyclohexyltin chloride [3091-32-5]</p> <p>2497.16 Tetra-n-butyltin [1461-25-2]</p>	11	500 µg/mL	Methanol	1 mL
S-4526-K-IO	Organotin Standard Mixture 7 -Tin Ethyl Derivatives	<p>2119.10 Mono-n-butyltriethyltin [17582-53-5]</p> <p>2120.12 Di-n-butyl-diethyltin [20525-62-6]</p> <p>1886.14 Ethyltri-n-butyltin [19411-60-0]</p> <p>2118.12 Monophenyltriethyltin [878-51-3]</p> <p>2117.16 Diphenyl-diethyltin [10203-52-8]</p> <p>1887.20 Ethyltriphenyltin [5424-25-9]</p> <p>2492.14 Mono-n-octyltriethyltin [16216-27-6]</p> <p>2491.20 Di-n-octyl-diethyltin [14775-13-4]</p> <p>2498.20 Ethyltricyclohexyltin [106376-80-1]</p> <p>2497.16 Tetra-n-butyltin [1461-25-2]</p>	10	1000 µg/mL	Isooctane	1 mL
S-4526-K-IOx5	Organotin Standard Mixture 7 -Tin Ethyl Derivatives	<p>2119.10 Mono-n-butyltriethyltin [17582-53-5]</p> <p>2120.12 Di-n-butyl-diethyltin [20525-62-6]</p> <p>1886.14 Ethyltri-n-butyltin [19411-60-0]</p> <p>2118.12 Monophenyltriethyltin [878-51-3]</p> <p>2117.16 Diphenyl-diethyltin [10203-52-8]</p> <p>1887.20 Ethyltriphenyltin [5424-25-9]</p> <p>2492.14 Mono-n-octyltriethyltin [16216-27-6]</p> <p>2491.20 Di-n-octyl-diethyltin [14775-13-4]</p> <p>2498.20 Ethyltricyclohexyltin [106376-80-1]</p> <p>2497.16 Tetra-n-butyltin [1461-25-2]</p>	10	1000 µg/mL	Isooctane	5 mL

Part No.	Product Name	Composition [CAS No.]	No. Compounds	Concentration	Matrix	Volume
S-4527-K-IO	Organotin Standard Mixture 8 - Tin IS Ethyl Derivatives	1955.11 Ethyltri-n-propyltin [3440-79-7] 2493.18 Di-n-heptyldiethyltin [165900-80-1] 2490.12 Tetra-n-propyltin [2176-98-9]	3	1000 µg/mL	Isooctane	1 mL
S-4527-K-IOx5	Organotin Standard Mixture 8 - Tin IS Ethyl Derivatives	1955.11 Ethyltri-n-propyltin [3440-79-7] 2493.18 Di-n-heptyldiethyltin [165900-80-1] 2490.12 Tetra-n-propyltin [2176-98-9]	3	1000 µg/mL	Isooctane	5 mL
S-4709-K-IO	Organotin Standard Mixture 10 - Tin Ethyl Derivatives	2119.10 Mono-n-butyltriethyltin [17582-53-5] 2120.12 Di-n-butyl-diethyltin [20525-62-6] 1886.14 Ethyltri-n-butyltin [19411-60-0] 2118.12 Monophenyltriethyltin [878-51-3] 2117.16 Diphenyl-diethyltin [10203-52-8] 1887.20 Ethyltriphenyltin [5424-25-9] 2492.14 Mono-n-octyltriethyltin [16216-27-6] 2491.20 Di-n-octyl-diethyltin [14775-13-4] 2498.20 Ethyltricyclohexyltin [106376-80-1] 2497.16 Tetra-n-butyltin [1461-25-2] 1955.11 Ethyltri-n-propyltin [3440-79-7] 2493.18 Di-n-heptyldiethyltin [165900-80-1] 2490.12 Tetra-n-propyltin [2176-98-9]	13	1000 µg/mL	Isooctane	1 mL
S-4709-K-IOx5	Organotin Standard Mixture 10 - Tin Ethyl Derivatives	2119.10 Mono-n-butyltriethyltin [17582-53-5] 2120.12 Di-n-butyl-diethyltin [20525-62-6] 1886.14 Ethyltri-n-butyltin [19411-60-0] 2118.12 Monophenyltriethyltin [878-51-3] 2117.16 Diphenyl-diethyltin [10203-52-8] 1887.20 Ethyltriphenyltin [5424-25-9] 2492.14 Mono-n-octyltriethyltin [16216-27-6] 2491.20 Di-n-octyl-diethyltin [14775-13-4] 2498.20 Ethyltricyclohexyltin [106376-80-1] 2497.16 Tetra-n-butyltin [1461-25-2] 1955.11 Ethyltri-n-propyltin [3440-79-7] 2493.18 Di-n-heptyldiethyltin [165900-80-1] 2490.12 Tetra-n-propyltin [2176-98-9]	13	1000 µg/mL	Isooctane	5 mL

Part No.	Product Name	Composition [CAS No.]	No. Compounds	Concentration	Matrix	Volume
S-4865-500-ME	DOTE-MOTE Mix	11002.36 DOTE [15521-58-1] 11003.38 MOTE [27107-89-7]	2	500 µg/mL	Methanol	1 mL
S-5376A-K-MEx5	Tin Chloride Mix 18A	1981.12 Tri-n-butyltin chloride [1461-22-9] 13628.18 Triphenyltin chloride, Purified (≥98%) [639-58-7]	2	1000 µg/mL	Methanol	5 mL



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