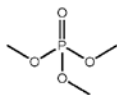




Phosphate Flame Retardants (PFRs)

Organophosphate compounds (OPs) are high production volume chemicals. They are utilized as flame retardants and plasticizers, antifoaming agents and additives not only in plastics, but in paints, lubricants and hydraulic fluids as well. The chlorinated OP compounds like tris(2-chloroethyl) phosphate and tris(1,3-dichloro-2-propyl) phosphate are flame retardants used in both flexible and rigid polyurethane foam (e.g. furniture foam, thermal insulation), rubber, textile coatings, and home electronics. OPs have been detected in indoor air and house dust, surface, ground, and even drinking water. Ongoing toxicological studies have shown several toxic effects of these compounds, prompting the recognition of potential ecological and human health concerns of neurotoxin and carcinogenic nature. AccuStandard is now providing a number of PFRs.

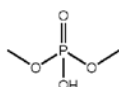
Trimethyl phosphate (TMP)



CAS 512-56-1 MF C₃H₉O₄P MW 140.08

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-016S	1 mL

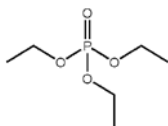
Dimethyl phosphate



CAS 813-78-5 MF C₂H₇O₄P MW 126.05

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-006S	1 mL

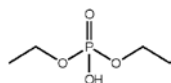
Triethyl phosphate (TEP)



CAS 78-40-0 MF C₆H₁₅O₄P MW 182.16

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-012S	1 mL

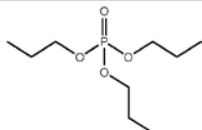
Diethyl phosphate (mono & di)



CAS 598-02-7 MF C₄H₁₁O₄P MW 154.10

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-005S	1 mL

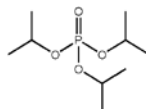
Tripropyl phosphate (TPPrP)



CAS 513-08-6 MF C₉H₂₁O₄P MW 224.23

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-021S	1 mL

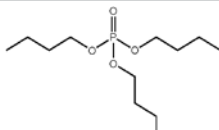
Triisopropyl phosphate (TIPP, TiPrP)



CAS 513-02-0 MF C₉H₂₁O₄P MW 224.23

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-013S	1 mL

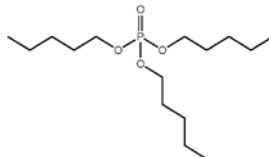
Tributyl phosphate (TBP)



CAS 126-73-8 MF C₁₂H₂₇O₄P MW 266.31

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-009S	1 mL

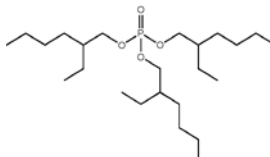
Tripentyl phosphate (TPeP)



CAS 2528-38-3 MF C₁₅H₃₃O₄P MW 308.39

Matrix	Cat. No.	Unit
100 µg/mL in Hexane	PFRS-019S-H	1 mL

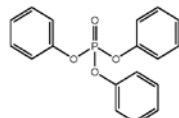
tris(2-Ethylhexyl) phosphate (TEHP)



CAS 78-42-2 MF C₂₄H₅₁O₄P MW 434.63

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-028S	1 mL

Triphenyl phosphate (TPP, TPHP)

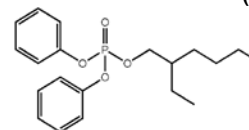


CAS 115-86-6 MF C₁₈H₁₅O₄P MW 326.28

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-020S	1 mL

Ethylhexyl diphenyl phosphate

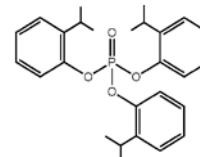
(EDP, DPEHP)



CAS 1241-94-7 MF C₂₀H₂₇O₄P MW 362.40

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-007S	1 mL

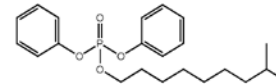
tris(2-Isopropylphenyl) phosphate



CAS 64532-95-2 MF C₂₇H₃₃O₄P MW 452.52

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-014S	1 mL

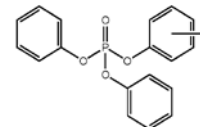
Isodecyl diphenyl phosphate



CAS 29761-21-5 MF C₂₂H₃₁O₄P MW 390.45

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-008S	1 mL

Cresyl diphenyl phosphate (CDP)

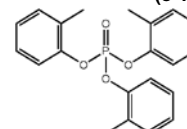


CAS 26444-49-5 MF C₁₉H₁₇O₄P MW 340.31

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-004S	1 mL

Tri-o-cresyl phosphate

(o-TCP, TOCP, TOTP)



CAS 78-30-8 MF C₂₁H₂₁O₄P MW 368.36

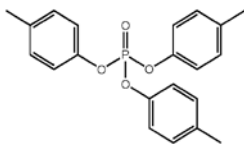
Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-017S	1 mL

Additional PFRs on reverse side

Phosphate Flame Retardants (PFRs)

Tri-p-cresyl phosphate

(p-TCP, TCP, TPTP)

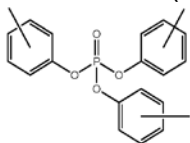


CAS 78-32-0 MF C₂₁H₂₁O₄P MW 368.36

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-018S	1 mL

Tricresyl phosphate (mix of isomers)

(TCP, TCrP, TToP)

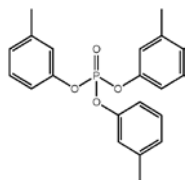


CAS 1330-78-5 MF C₂₁H₂₁O₄P MW 368.36

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-011S	1 mL

Tri-m-cresyl phosphate

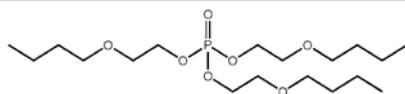
(m-TCP, TMTP)



CAS 563-04-2 MF C₂₁H₂₁O₄P MW 368.36

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-015S	1 mL

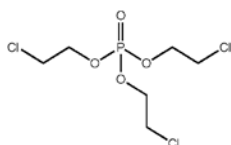
tris(2-Butoxyethyl) phosphate (TBEP)



CAS 78-51-3 MF C₁₈H₃₉O₇P MW 398.47

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-022S	1 mL

tris(2-Chloroethyl) phosphate (TCEP)

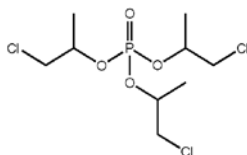


CAS 115-96-8 MF C₆H₁₂Cl₃O₄P MW 285.49

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-024S	1 mL

tris(1-Chloro-2-propyl) phosphate

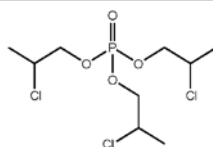
(TCPP)



CAS 13674-84-5 MF C₉H₁₈Cl₃O₄P MW 327.57

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-025S	1 mL

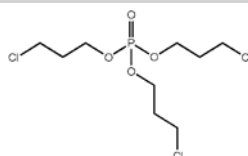
tris(2-Chloropropyl) phosphate



CAS 6145-73-9 MF C₉H₁₈Cl₃O₄P MW 327.57

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-023S	1 mL

Tri(3-chloropropyl) phosphate (TCPP)

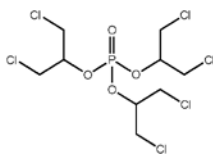


CAS 26248-87-3 MF C₉H₁₈Cl₃O₄P MW 327.57

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-010S	1 mL

tris(1,3-Dichloro-2-propyl) phosphate

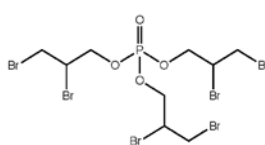
(TDCPP, TDCP)



CAS 13674-87-8 MF C₉H₁₅Cl₆O₄P MW 430.98

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-027S	1 mL

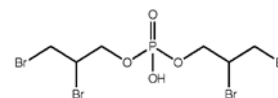
tris(2,3-Dibromopropyl) phosphate



CAS 126-72-7 MF C₉H₁₅Br₆O₄P MW 697.61

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-026S	1 mL

bis(2,3-Dibromopropyl) phosphate

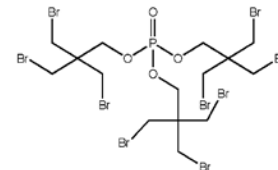


CAS 5412-25-9 MF C₆H₁₁Br₄O₄P MW 497.74

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-002S	1 mL

tris(Tribromoneopentyl) phosphate

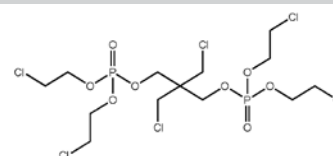
(TTBNP)



CAS 19186-97-1 MF C₁₅H₂₄Br₉O₄P MW 1018.46

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-029S	1 mL

tetrakis(2-Chloroethyl)dichloro-isopentyl diphosphate (V6)

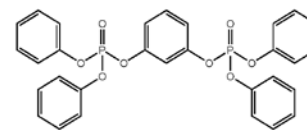


CAS 38051-10-4 MF C₁₃H₂₄Cl₆O₈P₂ MW 582.99

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-003S	1 mL

Resorcinol bis(diphenyl phosphate)

(RDP)

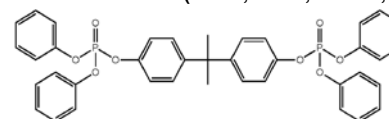


CAS 57583-54-7 MF C₃₀H₂₄O₈P₂ MW 574.45

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-030S	1 mL

Bisphenol A bis(diphenyl phosphate)

(BADP, BAPP, BPADP, BDP)



CAS 5945-33-5 MF C₃₉H₃₄O₈P₂ MW 692.63

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	PFRS-001S	1 mL