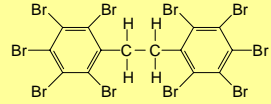
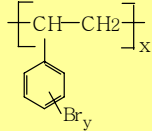
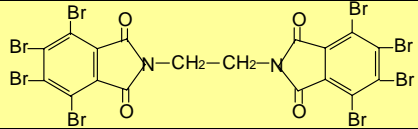
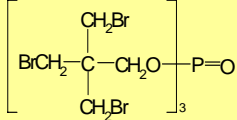
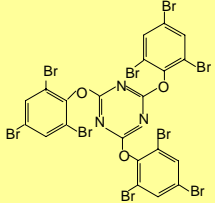
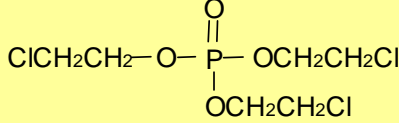
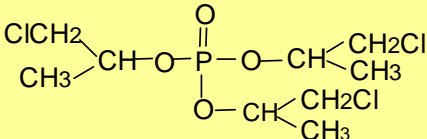




YOUNG'S CORP

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HALOGEN TYPE FLAME RETARDANTS (MEETS RoHS REGULATION)

Product Name	Structure	CAS No.	Molecular Weight	P %	N %	Cl %	Br %	Density	Viscosity (cps)	Application
1. DBDPE		84852-53-9	971.2	----	----	----	82.0 ↑	----	----	PS/ABS/PA/PBT...etc
2. BPS		88497-56-7	180,000~200,000	----	----	----	56~66	----	----	PS/ABS/PA/PBT...etc
3. CG-952		32588-76-4	951.43	----	----	----	66.5 ↑	----	----	PS/ABS/PA/PBT...etc
4. CG-703		19186-97-1	1018.46	3	----	----	70.00%	2.3	----	PP/PE/PS/ABS/PMMA/PET/PA/PP Fiber, non-woven, transparency
5. FR-245		25713-60-4	1067.4	----	3.93%	----	67.00%	----	----	ABS/HIPS/PCB...etc
6. TCEP		115-96-8	285.49	10.8%	----	35.6%	----	1.42 (20°C)	35 (25°C)	PVC · Unsaturated Polyesters & other Resins
7. TCPP		6145-73-9	327.57	9.4%	----	32.4%	----	1.295 (25°C)	65 ~ 70 (25°C)	Rigid PU foam



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8. TDCPP		136740-87-8	430.90	7.1%	----	49.0%	----	1.512 (25°C)	1500 ± 300 (25°C)	Rigid · Flexible PU foam
9. CG-V6		38051-10-4	552.02	10.5%	----	38.5%	----	1.45 (25°C)	1500 ~ 2000 (25°C)	Flexible PU foam
10. CG-505		----	613.00	12.5%	----	27.5%	----	1.45 (25°C)	450 ~ 650 (25°C)	Flexible PU foam
11. CG-780		----	----	7.0%	----	38.3%	9.80%	1.543 (25°C)	800 ~ 1000 (25°C)	Flexible PU foam
12. DBDPO		1163-19-5	959.20	----	----	----	83%	3	----	HIPS, LDPE, PP, ABS, PBT,
13. HBCD		3194-55-6	641.7	----	----	----	74%	----	----	EPS, Polypropylene fiber
14. TBBA		79-94-7	543.7	----	----	----	58%	2.17	----	PC, Phenolic Resin, ABS



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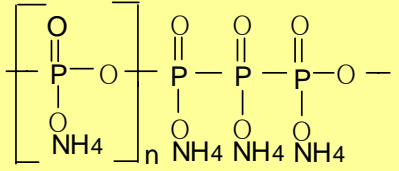
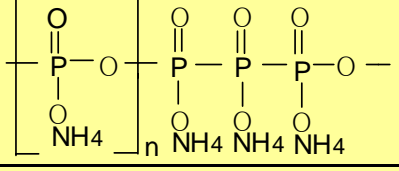
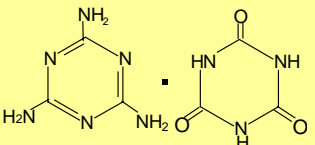
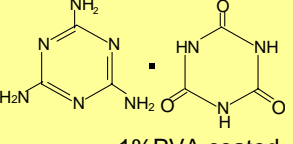
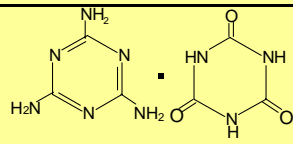
Product Name	Structure	CAS No.	Molecular Weight	P %	N %	Cl %	Br %	Density	Viscosity (cps)	Application
15. TBP		118-79-6	330.8	....	....	....	72.30%	2.55	....	Brominated Epoxy
16. BEO			30,000 Max	....	....	....	58% Max	---	....	ABS/HIPS/PVT...etc
17. BT-93W		32588-76-4	951.5	65.96%	2.03	engineering resin(PC, PA, PET, PBT..)
18. BDDP		21850-44-2	543.7	58% min	---	---	ABS, Epoxy lanminate

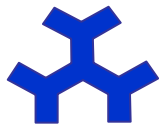


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HALOGEN FREE FLAME RETARDANTS

Product Name	Structure	CAS No.	Molecular Weight	P %	N %	M. P.	Particle Size	Appearance	Application
1. APP		68333-79-9	$n \approx 1,000$	30	14	----	20 μ m ↓	White Powder	High M.W. Encapsulated, anti-hydrolysis for PP/PE and paints/Adhesives
2. APP-M		68333-79-9	$n \approx 1,000$	30	14	----	20 μ m ↓	White Powder	High M.W for PP/PE.
3. MPP	$C_3H_2N_6(HPO_3)_m$	218768-84-8	----	14.5	38.5	----	22 μ m ↓	White Powder	PA-6/ GF, PA66/GF, PBT, PU
4. MC-100		37640-57-6	255.24	----	49.3	---	2 μ m ↓	White Powder	PA-6/ PBT/ PU
5. MC-110	 1%PVA coated	37640-57-6	255.24	----	49.3	----	d50: 2 μ m ↓	White Crystal Powder	PA-6/ PBT/ PU
6. MC-120	 1% Stearic acid coated	37640-57-6	255.24	----	49.3	----	d50: 2 μ m ↓	White Crystal Powder	PA-6/ PBT/ PU

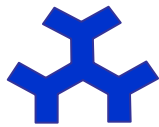


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HALOGEN FREE FLAME RETARDANTS

Product Name	Structure	CAS No.	Molecular Weight	P %	N %	M. P.	Particle Size	Appearance	Application
7. Melamine		108-78-1	126.13	---	66.6	250°C	400 ~ 500mesh	White Powder	PU foam/ Plastics
8. Mg(OH) ₂	Mg(OH) ₂	1309-42-8	58.31	---	---	---	d50: 2μm	White Powder	PP/PE/PS/ABS
9. ATH	Al(OH) ₃	21645-51-2	77.99	---	---	---	d50: 1μm	Odorless white Powder	PVC/PP/PE/PS/ABS
10. THEIC		839-90-7	261.23	---	---	133.5 ~ 137.5°C	---	White Powder	Synergist for flame retardant
11. Red Phosphorous		7723-14-0	31	85	---	---	10 μm	Purple flowable Powder	PP/PE/PS/Epoxy/TPU/TPE
12. TMP		512-56-1	140.07	21 ↑	---	---	---	Colorless transparent liquid	PVC/PU/Acrylic resin
13. TEP		78-40-0	182.16	17	---	---	---	Colorless transparent liquid	PVC/PU/Acrylic resin

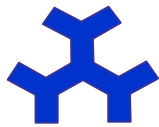


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Product Name	Structure	CAS No.	Molecular Weight	P %	N %	M. P.	Particle Size	Appearance	Application
14. TBP		126-73-8	266.32	11.64	----	----	----	Colorless transparent liquid	PVC/PU/Acrylic resin
15. TBEP		78-51-3	398.48	7.78	----	----	----	Colorless to clear yellow transparent liquid	PVC/PU/Acrylic resin
16. TOP		1806-54-8	434.64	7.13	----	----	----	Colorless to clear yellow transparent liquid	PVC/PU/Acrylic resin
17. TPP		115-86-6	326.28	9.5	----	48.5	----	White crystal flake	PVC/PC/ABS alloy, phenolic resin
18. CDP		26444-49-5	340.2	9.1	----	----	----	clear slightly yellowish liquid	PVC/PU/Acrylic resin, phenolic resin
19. TCP		78-30-8	368.36	8.2	----	----	----	Transparent liquid	PVC/PU/Acrylic resin, phenolic resin



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Product Name	Structure	CAS No.	Molecular Weight	P %	N %	M. P.	Particle Size	Appearance	Application
20. TXP		25155-23-1	410.44	7.55	----	----	----	Colorless or light yellow liquid	PVC/PU/Acrylic resin, phenolic resin
21. IPPP-35	<p>R=H or isopropyl</p>	78-30-8	368.36	8.3 max	----	----	----	Colorless or Light yellow liquid	PVC flame-retarded plasticizer, phenolic resin
22. IPPP-65	<p>R=H or isopropyl</p>	78-30-8	368.36	----	----	----	----	Colorless transparent liquid	PVC flame-retarded plasticizer, phenolic resin
23. IPPP-95	<p>R=H or isopropyl</p>	78-30-8	368.36	----	----	----	----	Isopropylated Triaryl Phosphate	PVC flame-retarded plasticizer, phenolic resin
24. PEP		...	180.1	17	----	205-212°C	----	White Powder	PBT/PA/PP/PCB/textiles
25. CG-6		322089	255	12.15	----	----	----	Clear Yellow-amber Liquid	Phenolic resin, PU



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Product Name	Structure	CAS No.	Molecular Weight	P %	N %	M. P.	Particle Size	Appearance	Application
26. FR-45P	<p>$(CH_3O)_X-P(CH_3)-[O-CH_2-C_2H_4-O-CH_2-C_2H_4-O-CH_3]_{2-X}$ $X=0,1$</p>	...	---	20.5% ↑	---	---	---	Colorless liquid	ABS/PS/PBT/Textiles
27. FR-214	<p>$HO-P(=O)(C_6H_5)-CH_2CH_2COOH$</p>	14657-64-8	214.2	14.5	---	---	---	White Powder	Polyester & Nylon Fibre
28. FR-DOPO	<p>$H-P(=O)(C_6H_5)-O-C_6H_4-C_6H_5$</p>	35948-25-5	216.18	14.3	---	115 ~119°C	---	White Powder	Epoxy CCL.
29. CG-411	$CF_3CF_2CF_2CF_2SO_3K$	29420-49-3	338.12	---	---	265°C	---	White Powder	Transparent PC flame retardant
30. CG-KSS	<p>$C_6H_5-SO_2-C_6H_4-SO_3K$</p>	63316-43-8	336.43	---	---	---	D50:48 μM	White Powder	Transparent PC flame retardant
31. RDP	<p>$C_6H_5-O-P(=O)(C_6H_5)-[C(CH_3)_2-C_6H_4]_n-O-P(=O)(C_6H_5)-C_6H_5$</p>	181028-79-5	693	8.9	---	---	---	Pale Yellow Liquid	PC/ABS alloy
32. CG-693S		181028-79-5	...	8~9	...	48.5~62°C	---	White chrystal light powder	to replace PX-200, PC/ABS alloy, ABS, PBT, PC & PCB



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HALOGEN FREE FLAME RETARDANTS

Product Name	Structure	CAS No.	Molecular Weight	P %	N %	M. P.	Particle Size	Appearance	Application
33. CG-686		139189-30-3	686	9	---	95°C	---	white powder	PC/ABS ALLOY, PBT, PCB
34. PTFE		9002-84-0	---	---	---	327 ± 5°C	1 ~ 5µm	White Powder	Anti-dripping additive
35. FCP-760		68333-79-9		24%	17%		8µm	White Powder	PP/PE/PS/polyolefin/ coatings/ Adhesives