

**Tab. 5.11: Flame retardants**

Substanz Substance	Abkürzung Abbreviation	CAS-No.:	GUT Verwendungsverbot ban on use
Polybrominated biphenyls	PBBs a)	59536-65-1	🚫
Polybrominated biphenyl ethers	PBDEs b)	-.-	🚫
Hexabromocyclododecanes	HBCDDs c)	25637-99-4	🚫
Tris-(2,3-dibromopropyl)phosphate	TRIS	126-72-7	🚫
Tris-(aziridinyl)-phosphinoxide	TEPA	545-55-1	🚫
Chlorinated paraffins	CPs d)	-.-	🚫
Antimony trioxide	Sb2O3	1309-64-4	🚫
Antimony pentoxide	Sb2O5	1314-60-9	🚫
Tris-(2-chloroethyl)phosphate	TCEP	115-96-8	🚫
Trixylylphosphate	TXP	25155-23-1	🚫
Tris-(1,3-dichloro-2-propyl)phosphate	TDCPP	13674-87-8	🚫
Tris(2-chloro-1-methylethyl)phosphate	TCPP	13674-84-5	🚫
Triphenyl phosphate	TPP	115-86-6	🚫
Boric acid	-	10043-35-3	🚫
Diboron trioxide	-	1303-86-2	🚫
Tetraboron disodium heptaoxide, hydrate	-	12267-73-1	🚫
Disodium tetraborate, anhydrous	-	1330-43-4	🚫
Orthoboric acid, sodium salt	-	13840-56-7	🚫
Disodium tetraborate decahydrate	-	1303-96-4	🚫
Disodium tetraborate Pentahydrate	-	12179-04-3	🚫
Disodium octaborate	-	12008-41-2	🚫
2,2-Bis(bromomethyl)propane-1,3-diol	BBMP	3296-90-0	🚫
Bis-(2,3-dibromopropyl)phosphate	BIS	5412-25-9	🚫
Tetrabromobisphenol A	TBBPA	79-94-7	🚫
Tri-o-cresylphosphat	-	78-30-8	🚫

Note:

Ban on use does not apply to listed substances only, but is always based on current state of knowledge.

-.- = more than one CAS-No. / substances group

a) PBBs = e.g. (Monobromodiphenyl (MBB), Dibromodiphenyl (diBB), Tribromodiphenyl (triBB), Tetrabromodiphenyl (tetraBB), Pentabromodiphenyl (pentaBB), Hexabromodiphenyl (hexaBB), Heptabromodiphenyl (heptaBB), Octabromodiphenyl (octaBB), Nonabromodiphenyl (nonaBB), Decabromodiphenyl (decaBB)

b) PBDEs = e.g. Monobromodiphenyl ether (MBDE), Dibromodiphenyl ether (diBDE), Tribromodiphenyl ether (triBDE), Tetrabromodiphenyl ether (tetraBDE), Pentabromodiphenyl ether (pentaBDE), Hexabromodiphenyl ether (hexaBDE), Heptabromodiphenyl ether (heptaBDE), Octabromodiphenyl ether (octaBDE), Nonabromodiphenyl ether (nonaBDE), Decabromodiphenyl ether (decaBDE)

c) HBCDDs =  $\alpha$ -Hexabromocyclododecane ( $\alpha$ -HBCDD),  $\beta$ -Hexabromocyclododecane ( $\beta$ -HBCDD),  $\gamma$ -Hexabromocyclo-dodecane ( $\gamma$ -HBCDD), Hexabromocyclododecane (HBCD)

d) CCPs = Short chain chlorinated paraffins, C10-13 (SCCPs), Short chain chlorinated paraffins, C12-13 (SCCPs), Medium chain chlorinated paraffins, C14-17 (MCCPs)