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			CAS	EC	(%)	
I	1		120-12-7	204-371-1	N.D.	0.005%
I	2	4,4'-	101-77-9	202-974-4	N.D.	0.005%
I	3	(D	84-74-2	201-557-4	N.D.	0.005%
I	4	*	7646-79-9	231-589-4	N.D.	0.01%
I	5	*	1303-28-2	215-116-9	N.D.	0.01%
I	6	*	1327-53-3	215-481-4	N.D.	0.01%
I	7	*	7789-12-0 10588-01-9	234-190-3	N.D.	0.01%
I	8		81-15-2	201-329-4	N.D.	0.005%
I	9	(2- (DEHP)	117-81-7	204-211-0	N.D.	0.005%
I	10	(HBCD	25637-99-4 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	247-148-4 221-695-9	N.D.	0.005%
I	11	(SCCP	85535-84-8	287-476-5	N.D.	0.01%
I	12	(TBTC	56-35-9	200-268-0	N.D.	0.005%
I	13	*	7784-40-9	232-064-2	N.D.	0.01%
I	14	(B	85-68-7	201-622-7	N.D.	0.005%
I	15	*	15606-95-8	427-700-2	N.D.	0.01%
II	16		90640-80-5	292-602-7	N.D.	0.05%
II	17	, , ***	91995-17-4	295-278-5	N.D.	0.05%
II	18	, ,	91995-15-2	295-275-9	N.D.	0.05%
II	19		90640-82-7		N.D.	0.05%

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			CAS	EC	(%)	
III	30	*	10043-35-3 11113-50-1	233-139-2 234-343-4		

			CAS	EC	(%)	
VI	59	2- ()	90-04-0	201-963-1	N.D.	0.005%
VI	60	4-(1,1,3,3- ()	140-66-9	205-426-2	N.D.	0.005%
VI	61	1,2-	107-06-2	203-458-1	N.D.	0.005%
VI	62	(2- ()	111-96-6	203-924-4	N.D.	0.005%
VI	63	*	7778-39-4	231-901-9	N.D.	0.01%
VI	64	*	7778-44-1	231-904-5	N.D.	0.01%
VI	65	*	3687-31-8	222-979-5	N.D.	0.01%
VI	66	N,N- (DMAC)	127-19-5	204-826-4	N.D.	0.005%
VI	67	4,4'- (2- () (MOCA)	101-14-4	202-918-9	N.D.	0.005%
VI	68		77-09-8	201-004-7	N.D.	0.005%
VI	69	*	13424-46-9	236-542-1	N.D.	0.01%
VI	70	2,4,6- ()*	15245-44-0	239-290-0	N.D.	0.01%
VI	71	*	6477-64-1	229-335-2	N.D.	0.01%

			CAS	EC	(%)	
VIII	86	4- , 9 9 UVCB	-	-	N.D.	0.05%
VIII	87		123-77-3	204-650-8	N.D.	0.05%
VIII	88		-	-	N.D.	0.05%
VIII	89		2058-94-8	218-165-4	N.D.	0.05%
VIII	90		72629-94-8	276-745-2	N.D.	0.05%
VIII	91	, - -	85-42-7 13149-00-3 14166-21-3	201-604-9 236-086-3 238-009-9	N.D.	0.05%
VIII	92	, 4- 1- 3-	25550-51-0 19438-60-9 48122-14-1 57110-29-9	247-094-1 243-072-0 256-356-4 260-566-1	N.D.	0.05%
VIII	93		376-06-7	206-803-4	N.D.	0.05%
VIII	94	(DIPP)	605-50-5	210-088-4	N.D.	0.05%
VIII	95	1,2-	84777-06-0	284-032-2	N.D.	0.05%
VIII	96		776297-69-9	--	N.D.	0.05%
VIII	97		625-45-6	210-894-6	N.D.	0.05%
VIII	98		307-55-1	206-203-2	N.D.	0.05%
VIII	99		629-14-1	211-076-1	N.D.	0.05%
VIII	100	3- -2- -2-(3-)	143860-04-2	421-150-7	N.D.	0.05%
VIII	101	2,4-	95-80-7	202-453-1	N.D.	0.05%
VIII	102	N-	79-16-3	201-182-6	N.D.	0.05%
VIII	103	*	12065-90-6	235-067-7	N.D.	0.01%
VIII	104	4-	92-67-1	202-177-1	N.D.	0.05%
VIII	105		88-85-7	201-861-7	N.D.	0.05%
VIII	106	() *	12578-12-0	235-702-8	N.D.	0.01%
VIII	107	*	10099-74-8	233-245-9	N.D.	0.01%
VIII	108	*	12202-17-4	235-380-9	N.D.	0.01%
VIII	109	*	1317-36-8	215-267-0	N.D.	0.01%
VIII	110	*	12060-00-3	235-038-9	N.D.	0.01%
VIII	111	4,4'- -3,3'-	838-88-0	212-658-8	N.D.	0.05%

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CAS

EC

(%)

			CAS	EC	(%)	
IX	143	(APFO)	3825-26-1	223-320-4	N.D.	0.01%
IX	144	(PFOA)	335-67-1	206-397-9	N.D.	0.01%
X	145	()	25155-23-1	246-677-8	N.D.	0.01%
X	146	C.I. 38 ***	1937-37-7	217-710-3	N.D.	0.01%
X	147		84-75-3	201-559-5	N.D.	0.01%
X	148	*	1306-23-6	215-147-8	N.D.	0.01%
X	149	C.I. 28 ***	573-58-0	209-358-4	N.D.	0.01%
X	150	()*	301-04-2	206-104-4	N.D.	0.01%
X	151	1,2-	96-45-7	202-506-9	N.D.	0.01%
XI	152	,	68515-50-4	271-093-5	N.D.	0.01%
XI	153	*	10108-64-2	233-		

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CAS EC (%)

			CAS	EC	(%)	
XVIII	178	*	513-78-0	208-168-9	N.D.	0.01%
XVIII	179	*	21041-95-2	244-168-5	N.D.	0.01%
XVIII	180		218-01-9 1719-03-5	205-923-4	N.D.	0.01%
XVIII	181	1,3,4- 4- (RP-HP) -2,5- [4- ≥0.1% w/w]	-	-	N.D.	0.05%
XIX	182	(D4)	556-67-2	209-136-7	N.D.	0.01%
XIX	183	(D5)	541-02-6	208-764-9	N.D.	0.01%
XIX	184	(D6)	540-97-6	208-762-8	N.D.	0.01%
XIX	185		7439-92-1	231-100-4	N.D.	0.01%
XIX	186	*	12008-41-2	234-541-0	N.D.	0.01%
XIX	187	(g,h,i)	191-24-2	205-883-8	N.D.	0.01%
XIX	188		61788-32-7	262-967-7	N.D.	0.01%
XIX	189	(EDA)	107-15-3	203-468-6	N.D.	0.01%
XIX	190	(TMA)	552-30-7	209-008-0	N.D.	0.01%
XIX	191	(DCHP)	84-61-7	201-545-9	N.D.	0.01%
XX	192	4,4'-(1,3-)	6807-17-6	401-720-1	N.D.	0.01%
XX	193	[k]	207-08-9	205-916-6	N.D.	0.01%
XX	194		206-44-0	205-912-4	N.D.	0.01%
XX	195		85-01-8	201-581-5	N.D.	0.01%
XX	196		129-00-0	204-927-3	N.D.	0.01%
XX	197	1,7,7- [2,2,1] -3-(-2-	15087-24-8	239-139-9	N.D.	0.01%

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US EPA3052:1996, US EPA 3050B:1996, US EPA3060A:1996, US EPA 3550C:2007,
US EPA 3540C:1996, ISO 17353:2004(E), EN 14582:2016

ICP-OES, UV-Vis, IC, HPLC, GC-MS, GC-MS(NCI), GC-FID, Headspace-GCMS LC-MS-MS

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1. w/w % = ; 0.1%=1000mg/kg =1000ppm

2. N.D. = ()

3. *:

(TBTO) (DBTC) - (2-) (DOTE)
- (2-) (DOTE) (2-) (MOTE)
((TBT) (DBT) (DOT) (MOT))

4. **: CLP ((EC)No 1272/2008) VI
650-017-00-8

5. ***:C.I.:

6. ****:

7. *****: , , ,

8. ^: (2,4- 4,4'- , 2,6-)

9. : UVCB ()

10. :

11. : UVCB ()
4- 4- ≥ 0.1%
w/w MSDS

:

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:

1. REACH 1907/2006 33

0.1%

1)

2) 45

2. REACH 1907/2006 31 2

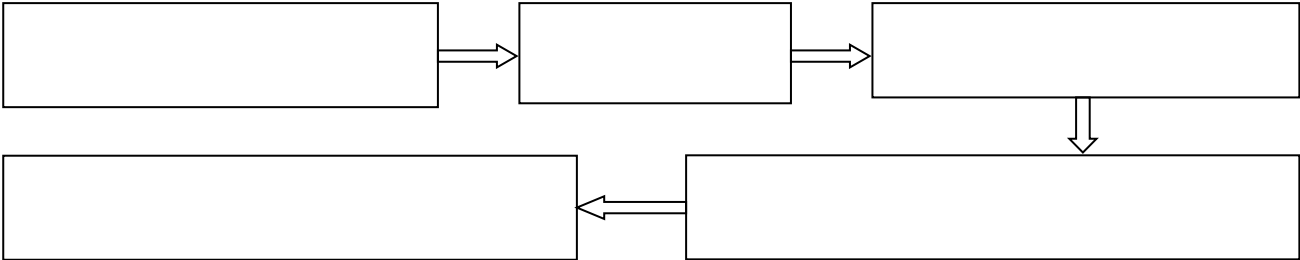
3. REACH 1907/2006 31 32 2

1) 1999/45/EC

2) 1999/45/EC

0.1%

0.2%



*** ***

1. “ ”
2. CTI
3.
4. CTI