

**Table 1. Caustic and chlorine contents for registered detergent-sterilizer products on the Irish market (Teagasc, March 2020 . Product names in order of decreasing caustic content.**

Product Name	PCS number	% Caustic	*Working solution (ppm)		% Chlorine	*Working solution (ppm)	
			Hot wash	Cold wash		Hot wash	Cold wash
<b>These products are best used in a daily hot wash with option of re-using solution as a cold wash at the next milking.</b>							
Top Circulation Cleaner	98060	21.46	1073	2146	3.41	171	341
Cryosan liquid	96895	18.67	1245	1867	3.45	230	345
Dairygold Hotwash XT	96461	18.34	1467	1651	2.61	209	235
Puresan line cleaner	96216	17.48	1165	1748	2.31	154	231
Unisan Liquid	96944	17.30	1151	1534	2.67	178	237
Aquasan	97375	16.80	1344	1493	3.26	261	290
Multisan	93472	16.42	1314	1460	3.43	274	305
Supersan Extra	96574	16.12	1017		3.13	198	
Universan	96324	15.94	1275	1417	3.49	279	310
Alkaklean	97873	14.44	722	1444	2.90	145	290
Alkalex	96595	14.49	966	1449	2.41	161	241
Geasan	97371	14.35	718	1435	3.07	154	307
<b>These products should be used with hot water daily and the solution not recycled.</b>							
DX Auto Tank	98820	12.22	122	x	2.97	297	x
Fullwood Morning Wash	98819	12.20	122	x	2.97	297	x
Dairy Wash Fourtress	98802	11.84	592	1184	2.48	124	248
Autoklene	95652	9.34	467	x	2.65	133	x
Deosan TC86	94490	9.30	465	x	3.71	185	x
Chlorodex	95654	9.21	461	x	2.84	142	x
DM Cid Ultra*	98175	9.03	903	x	0.00		x
Alkasan	95651	7.86	82	x	1.63	393	x
<b>These products have higher than recommended levels of chlorine present and should be avoided to minimize residues in milk</b>							
Parlosan	96404	17.14	137	1600	3.68	294	343
CircoactionAF1	96147	10.09	505	x	6.96	348	x
Hyproclor ED	96263	8.75	486	x	4.49	249	x
Purechem circulation	96870	8.58	268	x	4.97	155	
DM Cid	98174	7.63	763	x	4.05	404	x
DX Tank Cleaner	96215	5.12	160	x	4.85	152	x
CircopowerAFM	96148	5.43	190	x	6.13	215	x
BFS Hotwash	98686	1.9	127	x	10.64	709	x

PCS number = Pesticide control service number, indicates that the product is registered with DAFM and therefore can be legally sold on the Irish market

- Working solutions are calculated based on manufactures recommended usage rates and chemical content of products
- A minimum of 800 ppm of caustic in the working solution is recommended for hot cleaning where the product is reused cold for the afternoon wash. Higher working solutions are required if a hot wash is not used daily
- Lower usage rates may be considered for products with high caustic % when used hot and the solution is not recycled
- Detergents with a lower caustic working solution (<800ppm) will give satisfactory cleaning when used with hot water and the solution is not recycled.
- Increasing the usage rate of products to achieve higher caustic levels may result in non-acceptable levels of chlorine in the working solution.
- Choose products with a chlorine working solution less than 300 ppm.
- \* This product does not contain sodium hypochlorite. The disinfectant agent is Diamine.
- Avoid products with chlorine levels above that recommended for avoidance of residues.
- Products highlighted have chlorine content > 3.5% and/or use high working solutions of chlorine.