

WRC Natsurv Specific Water Intakes for different industrial sectors

The purpose of NATSURV documents is to review the status of the South African manufacturing industries with specific focus on national production capacity, specific water intake and effluent volumes, specific energy consumption rates and best practices in the management of water and effluent. The table below presents the specific water intake for various industrial sectors, the full reports can be accessed by clicking on the industrial sector.

Year	Industry	Average	Min.	Max	Unit
2017	red meat (10101)				
	>100 SU	910	2050	500	l/cattle unit
	50 - 100	1040	2080	280	l/cattle unit
	20-50	2.04	2600	1480	l/cattle unit
2016	malt beer (11031)				
	Small breweries	5,2	1,5	9,0	l/l
2016	Sorghum beer (11032)				
	Sorghum Malting	7850	-	-	l/t
	Brewing	3,54	3.19	3.9	l/l
2015	soft drinks (1104)				
	Soft Drink Factories	0,8	0,1	3,8	l/l
2005	oil refineries & re-refineries (192)				
	refineries (crude)	0,57	0,51	0,67	l/kg
	refineries (synthetic)	2,9	0,06	7,2	l/kg
	re-refinery	1,43	0,06	7,2	l/kg
2005	Electricity Generation (35101)				
	recycling water-cooled coal	1,95	0,51	0,67	l/kwh
	once through wet-cooled coal	6,5	0,06	7,2	l/kwh
	Dry cooled coal	0,09	0,06	7,2	l/kwh
	Nuclear	0,07	0,06	7,2	l/kwh
1993	poultry (10101)				
	>10 000 birds	17	15	20	l/bird
	>4 000 birds	20	15	25	l/bird
1993	textiles (131)				
	Textile factories	137	95	400	l/kg
1990	Paper and Pulp (1701)				
	Integrated pulping & paper mill	58	33	136	l/kg

Year	Industry	Average	Min.	Max	Unit
	Pulp and Paper Products Plant	58	1	49	l/kg
1990	sugar (1072)				
	Sugar mill	0,6	0,3	1	l/kg
1989	edible oil (10401)				
	Milling	2,60	2,10	3,10	l/kg
	Refining	3,80	3,20	4,60	l/kg
1989	Dairy (105)				
	unpacked milk	1,6	0,75	5,5	l/l
	bottled milk	3	2	4,4	l/l
	sacheted milk	1,7	1,1	3,2	l/l
	Cartoned milk	2,2	1,5	2,6	l/l
	Dairy Products				
	Cultured products	10,2	6,3	13,8	l/l
	Fruit juices and mixes	2,7	0,75	5,5	l/l
	Sterilised/UHT products	3,7	2	6,2	l/l
	Butter	1,5	1,3	6,9	l/kg
	Ice Cream	2,5	1,9	3,1	l/kg
	skim milk	3,6	2,1	5	l/kg
	Milk Powder	11,8	8,7	16,6	l/kg
	Cheese	23	16,4	29	l/kg
	Condensed milk	4,4	3,5	5,3	l/l
1989	tanning (1511)				
	Full tanneries	432	320	744	l/hide
1989	Laundry (96010)				
	rinse water recycle	9	-	-	l/kg
	No rinse water recycle	30	-	-	l/kg
1987	Fruit & Vegetable Processing (10300)	7,13			
	Apples (canned)	6,62	4,3	11,25	l/kg
	Apples (juiced)	1,84	-	-	l/kg
	Apricots (canned)	5,5	2,5	11,5	l/kg
	Beans in Tomato Sauce(Canned)	20	20	70	l/kg
	Beetroot (Bottling)	8	8	24,8	l/kg
	Citrus (Canned & Juiced)	2,08	1,1	2,6	l/kg
	Corn (Canned)	9,25	6	11	l/kg
	Green Beans (Canned)	7,4	-	-	l/kg
	Guavas (Canned)	6,4	4	7	l/kg
	Peaches (Canned)	6,88	2,5	12	l/kg
	Pears (Canned)	12,7	4,5	29	l/kg

Year	Industry	Average	Min.	Max	Unit
	Pears (Juiced)	1,91	-	-	l/kg
	Peas (Canned)	22,8	19	25	l/kg
	Pineapples (Canned)	2,94	2,1	4,55	l/kg
	Strawberries (Canned)	17,8	6,8	21	l/kg
	Tomatoes (Canned)	2,44	2	3	l/kg
	Broccoli (Frozen)	25	-	-	l/kg
	Cauliflower (Frozen)	25	-	-	l/kg
	Carrots (Frozen)	8,1	6	26	l/kg
	Corn (Frozen)	4,63	-	-	l/kg
	Green Beans (Frozen)	27	10	15	l/kg
	Peas (Frozen)	30	-	-	l/kg
	Potatoes (Frozen)	25,7	-	-	l/kg
	Other (Frozen)	19	-	-	l/kg
	Other (Canning)	9	-	-	l/kg
	Berry (Canning)	17	6,8	27,65	l/kg