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Phosphates in Washing Products, II*

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by

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Some soaps and detergents contaminate the lake with much more phosphate than others. The amount of phosphate released depends upon both the percentage of phosphate in the package and the amount used for each load of wash.

This is a list of the amount of phosphate put into the water with each machine load of wash when you use the smallest amount of soap or detergent recommended on the box. Products are listed in increasing amounts of phosphate.

The reasons for using as little phosphate as possible in your wash are explained in a full length R.C.S.I. Bulletin on Phosphate in Washing Products (February, 1970). The bulletin corrects two common misconceptions. Detergents are not the only source of phosphate pollution, and phosphates are bad only for lakes, not for people. For a copy, send a self-addressed, stamped envelope to the Secretary of the R.C.S.I. at the above address.

The first R.C.S.I. bulletin on phosphates in washday products listed the results of tests done by our group using the official method from the American Public Health Association-American Waterworks Association handbook. We also copied information about phosphate in products published by the New York Times from a report by Limnatics Laboratories. Our readings were low compared to those done later by others, and we suspected that the APHA method did not detect some of the phosphate water softeners used in the detergent. This was checked and confirmed. The method picked up orthophosphate, but greatly underestimated triphosphate. We conclude that our report underestimated the phosphate content of many washday products. We ask R.C.S.I. members to discard the figures from our analyses and use instead the chart that follows. Readings in that list were tested by the R.C.S.I. by a fully reliable method and confirmed. We have been informed that Pollution Probe has also obtained confirmation of their results from some manufacturers.

A final caution is necessary in judging the desirability of a product. In addition to the major ingredients, the washday products contain other chemicals of various nature which may affect people or have environmental consequences. We have no information about them at this time.

Grams of Phosphate in a Machine Load of Wash

<u>Presoak, soap or detergent</u>	<u>Amount of phosphate put into your machine with each load of wash</u>
<u>Low phosphate laundry</u>	
ivory snow <sup>1</sup>	less than 1 gram
*lux flakes <sup>1</sup>	less than 1 gram
aquilun (Stanley) <sup>2</sup>	2 grams
LOC (Amway) <sup>2</sup>	3 grams
Culligan's <sup>1,2</sup>	3.7 grams
ivory flakes <sup>1</sup>	5 grams
LD 2.8 (Bonded chem.) <sup>2</sup>	9.2 grams
instant fels <sup>1</sup>	11 grams
B-7 (Bestline) <sup>2</sup>	14 grams
<u>Medium phosphate laundry</u>	
*SA 8 (Amway) <sup>2</sup>	20 grams
*trizyme (Amway) <sup>2</sup>	28 grams
<u>High phosphate laundry</u>	
*bold	30 grams
*dreft	30 grams
*breeze	33 grams
*ajax-2	35 grams
axlon	35 grams
*fab	35 grams
*duz	38 grams
blue triplex (McCurdy)	42 grams
*drive	43 grams
*tide XK	43 grams
*chaer	44 grams
Sears	47 grams
*surf	47 grams
*oxydol	49 grams
*all concentrate	53 grams
<u>Miscellaneous cleaning aids in laundry</u>	
*Arm and Hammer sal soda	less than 1 gram
*borax	less than 1 gram
*downy	less than 1 gram
*snowy bleach	10 grams
*spic and span	43 grams
*calgon	54 grams
<u>Dishwashing Compounds</u>	
*Amway <sup>2</sup>	9.5 grams
cascade	10 grams
all	12 grams
various sink liquids	less than 1 gram per sink load

Starred entries-amount of phosphate per gram of detergent determined by Pollution Probe; unstarred, by R.C.S.I. Detergents weighed and grams of detergent per wash load determined by R.C.S.I. We used the smallest amount of detergent recommended on the box.

1. soap
2. available through company salesmen only