This dispenser **10** also has multiple pouches (pockets). Each one can be used to hold one or more laundry actives, for example, laundry detergent, bleach, enzymes, optical brightners, builders and other chemicals used to clean and condition laundry in the washer.

Optionals

Other ingredients commonly used in detergent compositions can be included in the compositions of the present invention. These include flow aids, color speckles, bleaching agents and bleach activators, suds boosters or suds suppressors, antitarnish and anticorrosion agents, soil suspending agents, soil release agents, dyes, fillers, optical brightners, germicides, pH adjusting agents, nonbuilder alkalinity sources, hydrotropes, enzymes, enzyme-stabilizing agents, chelating agents and perfumes.

The compositions of this invention need not be packaged in containers with good or excellent moisture barrier properties by virtue of unit doses contained in pouches.

Materials like sodium perborate tetrahydrate and monohydrate can be admixed with the granular detergent compositions of this invention. Other materials include enzymes, solid hydrogen peroxide sources, hydrogen peroxide activators, and silicone suds suppressors.

The following nonlimiting examples illustrate the detergent compositions of the present invention.

All percentages, parts, and ratios used herein are by weight unless otherwise specified.

TABLE 1

	Formula Examples (by parts)			
	No. 1	No. 2	No. 3	No. 4
C_{13} Linear alkyl benzene sulfonate	13.7	11.2	10.1	15.0
C_{14}–C_{15} Alkyl sulfate	13.7	11.2	10.1	15.0
Sodium sulfate	17.8	14.5	13.2	19.5
Tergitol 80-L50N*	2.1	1.8	1.6	2.3
Sodium polyacrylate (Avg. M.W. approx. 4500)	1.6	1.3	1.1	1.7
Polyethylene glycol (Avg. M.W. approx. 8000)	1.6	1.3	1.1	1.7
Ether polycarboxylate builder TMS/TDS, sodium salt 86:14 weight ratio TMS:TDS	10.6	31.8	30.1	0.0
Zeolite A**	15.8	13.0	11.7	17.3
Sodium citrate	9.5	0.0	6.9	20.2
Impurities, etc.	6.4	7.0	7.0	0.0
Unreacted	0.6	0.6	0.5	0.8
Water	6.4	6.4	6.4	6.4

*Tergitol 80-L50N is an ethoxylated/propoxylated 5.3 EO and 0.9 PO, approximately with alkyl chain lengths of C_8 (20%) to C_{10} (80%).
**Zeolite A is defined hereinabove.

The above formulas are prepared by making a crutcher mix of the base granule ingredients with a water level at about 40% and spray drying. It highly desirable to insure good initial flowability by adding a flow aid, 0.1–1 parts, to the spray dried granules. Some preferred flow aids are anhydrous and particulate colloidal silica, e.g., Cab-O-Sil (Cabot Corp.) and Sipernatt, available commercially. The spray dried base granules are packaged in water-permeable, water-insoluble unit dose pouches. It is also desirable to admix any optionals to the base granules prior to pouching.

The pouched base detergent granule compositions of the present invention are initially free flowing, but become lumpy or sticky upon storage under stress conditions, e.g., 80° F. (27° C.)/60–80% relative humidity. One test is to store the pouches in a closed cardboard box for a period of several weeks. The pouches are then examined for caking and stickiness after the first, second and fourth weeks. The pouches are also tested for dust grades. The pouched compositions of the present invention provide very good detergent solubility with improved dusting after stress storage, notwithstanding the development of lumpiness.

What is claimed is:

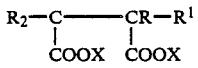
1. A through-the-wash disposable detergent dispenser comprising:

I. a porous, water-permeable, water-insoluble pouch said pouch comprising a spun-bonded polyester non woven;

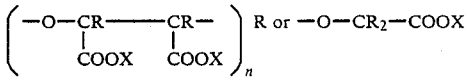
II. a unit dose amount of hygroscopic granular detergent composition contained in said pouch; said pouch having seals which are designed not to rupture during the wash; said composition comprising:

(a) from about 5% to about 45% by weight of an organic surfactant selected from the group consisting of anionic, nonionic, zwitterionic, ampholytic and cationic surfactants, and mixtures thereof;

(b) from about 5% to about 75% by weight of water-soluble neutral or alkaline salt comprising from about 1% to about 55%, by weight of the granular detergent composition, of a hygroscopic builder salt selected from the group consisting of: salts of citrate, formate, malate, succinate, acetate, tartrate, and ether polycarboxylate having the formula:



wherein R is selected from the group consisting of H, and OH with no more than one OH group being attached to any one carbon atom; R^1 is either a group having the formula



wherein each X is selected from the group consisting of H and cations which make the ether polycarboxylate builder water soluble and n is from 0 to 4; and said composition contains less than about 10% by weight of phosphate materials, said composition being formed by drying a concentrated aqueous slurry comprising the above components; and

(c) from 0% to about 30% by weight of a finely divided aluminosilicate ion exchange material selected from the group consisting of:

(1) crystalline aluminosilicate material of the formula:

$$Na_z[(AlO_2)_z.(SiO_2)_y].xH_2O$$

wherein z and y are at least 6, the molar ratio of z to y is from 1.0 to 0.5 and x is from 10 to 264, said material having a particle size diameter of from about 0.1 micron to about 10 mi-