

SENATE

S. No. 1016

Introduced by Senator Manuel "Lito" M. Lapid

EXPLANATORY NOTE

Borax, also called "*Sodium Tetraborate Decahydrate*" is an important boron compound, a mineral, and a salt of boric acid. It is usually a white powder consisting of soft colorless crystals that dissolve easily in water. Borax has a wide variety of uses. It is a component of many detergents, cosmetics, and enamel glazes. It is also used to make buffer solutions in biochemistry, as a fire retardant, as an anti-fungal compound for fibreglass, as an insecticide, as a flux in metallurgy, and as a precursor for other boron compounds.

The term *borax* is used for a number of closely related minerals or chemical compounds that differ in their crystal water content, but usually refers to the decahydrate. The origin of the name is traceable to the Medieval Latin *borax*, which comes from the Arabic *buraq*, which comes from either the Persian *burah* or the Middle Persian *burak*. Borax (sodium tetraborate) became an important chemical compound used as a flux for soldering - that is, for cleaning the surfaces of metal pieces to be joined by being melted together. Borax has many chemical properties that contribute to its cleaning power. Borax and other borates clean and bleach by converting some water molecules to hydrogen peroxide (H_2O_2). This reaction is more favorable in hotter water. The pH of borax is about 9.5, so it produces a basic solution in water, thereby increasing the effectiveness of bleach and other cleaners. In other chemical reactions, borax acts as a buffer, maintaining a stable pH needed to maintain cleansing chemical reactions. The boron, salt, and/or oxygen of boron inhibit the metabolic processes of many organisms. This characteristic allows borax to disinfect and kill unwanted pests. Borates bonds with other particles to keep ingredients dispersed evenly in a mixture, which maximizes the surface area of active particles to enhance cleaning power.

Among the most common uses of borax include: component of detergents; component of cosmetics; ingredient in enamel glazes; component of glass, pottery, and ceramics; fire retardant; anti-fungal compound for fiberglass and cellulose insulation; insecticide to kill ants and fleas; precursor for sodium perborate monohydrate that is used in detergents, as well as for boric acid and other borates; treatment for thrush in horses' hooves; used to make indelible ink for dip pens by dissolving shellac into heated borax.

However, with the rising consumer awareness and sensitivity in the preparation of food products, the general public is now becoming more and more conscious with respect to the chemical component being used in the preparation of food products and foodstuff purchased in the market.


While there are a lot of commercial uses for the chemical component of borax, studies indicate that the use of borax in food products should be strictly regulated. While borax is used as a food additive in some countries, the use of borax in food products is

now being banned in the United States. Boric acid, sodium borate, and sodium perborate are estimated to have a lethal dose (LD₅₀) from 0.1 to 0.5 g/kg in humans. These substances are toxic to all cells, and have a slow excretion rate through the kidneys. Kidney toxicity is the greatest, with liver fatty degeneration, cerebral edema, and gastroenteritis. Boric acid solutions used as an eye wash or on abraded skin are known to be especially toxic to infants, especially after repeated use because of its slow elimination rate.

Republic Act No. 7394 or the "Consumer Act of the Philippines" provides for the minimum labeling requirements for consumer products and additional labeling requirements for food. Moreover, Article 11, Section 15 of the 1987 Constitution provides that *"State shall protect and promote the right to health of the people and instill health consciousness among them."*

In accordance with this constitutional mandate, this bill proposes the mandatory labeling of food products indicating distinctly in their packages the Sodium Tetraborate Decahydrate (Borax) contents in food products in order to protect the health and well being of the general public.

In view of the foregoing, early passage of this bill is earnestly requested.


MANUEL "LITO" M. LAPID
Senator

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AN ACT
PRESCRIBING THE MANDATORY LABELING REQUIREMENTS FOR
FOOD PRODUCTS AND FOODSTUFF CONTAINING SODIUM
TETRABORATE DECAHYDRATE (BORAX), PROVIDING PENALTIES FOR
ITS VIOLATION THEREOF AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. Short Title. - This Act shall be known as the "**Sodium Tetraborate Decahydrate (Borax) Labeling Act of 2010**".

SEC. 2. Declaration of Policy. - It is the policy of the State to protect the interests of the consumer, promote his/her general welfare and to establish quality standards in food products to protect the health and general welfare of the general public. As such, the State shall implement measures to achieve the protection against hazards to health and safety and provide programs on Information, Education and Communication Campaign (IEC) to educate the general public.

Towards this end, the State shall enforce compulsory labeling of food products and foodstuff to enable the consumer to obtain accurate information as to the nature, quality, and quantity of the contents of the consumer products and to facilitate his/her comparison of the health value of such products.

SEC. 3. Definition of Terms. - For purposes of this Act, the following terms shall be defined as follows:

(a) Borax, also called "*Sodium Tetraborate Decahydrate*" is an important boron compound, a mineral, and a salt of boric acid. It is usually a white powder consisting of soft colorless crystals that dissolve easily in water. Borax has a wide variety of uses. It is a component of many detergents, cosmetics, and enamel glazes. It is also used to make buffer solutions in biochemistry, as a fire retardant, as an anti-

fungal compound for fibreglass, as an insecticide, as a flux in metallurgy, and as a precursor for other boron compounds. The term *borax* is used for a number of closely related minerals or chemical compounds that differ in their crystal water content, but usually refers to the decahydrate. Commercially sold borax is usually partially dehydrated. The origin of the name is traceable to the Medieval Latin *borax*, which comes from the Arabic *buraq*, which comes from either the Persian *burah* or the Middle Persian *burak*.

(b) **“Label” or “labeling”** means the display of written, printed or graphic matter on any consumer product or its immediate container, tag, literature or other suitable material affixed thereto for the purpose of giving information as to identity, components, ingredients, attributes, directions for use, specifications and such other information as may be required by law or regulations.

SEC. 4. Mandatory Labeling Requirements. - Within ninety (90) days from the date of effectivity of this Act, the Department of Health (DOH) shall issue the necessary guidelines and requirements for the mandatory labeling requirement for all consumer products, food products and foodstuff that contain *Sodium Tetraborate Decahydrate (Borax)*.

SEC. 5. Information, Education and Communication (IEC) Campaign. – The Department of Health (DOH), in cooperation with the Philippine Information Agency (PIA), is hereby mandated to conduct a comprehensive and nationwide information, education and communication (IEC) campaign in order to inform the general public of the purpose and objectives envisioned under this Act.

SEC. 6. Prohibited Acts on Labeling. - It shall be unlawful for any person, either as principal or agent, engaged in the labeling or packaging of any food consumer product, to display or distribute or to cause to be displayed or distributed in commerce, any food consumer product whose label does not conform to the provisions of this Act.

SEC. 7. Penalties. - Any person who shall violate the provisions of this Act shall be subject to a fine of not less than Fifty Thousand Pesos (Php 50,000) but not more than Two Hundred Thousand Pesos (Php 200,000) or imprisonment of not less than six (6) months but not more than four (4) years or both, at the discretion of the court.

SEC. 8. Separability Clause. - If any provision or part hereof, is held invalid or unconstitutional, the remainder of the law or the provision not otherwise affected shall remain valid and subsisting.

SEC. 9. Repealing Clause. - Any law, presidential decree or issuance, executive order, letter of instruction, administrative order, rule or regulation contrary to or inconsistent with, the provisions of this Act is hereby repealed, modified or amended accordingly.

SEC. 10. Effectivity Clause. - This Act shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation.

Approved,