Borates in detergents, cleaners and personal care products

Many different borates can be used to produce laundry detergents, household or industrial cleaners, and personal care products. The choice depends on the type, composition and quality of the final products, as well as the other ingredients. Borates function in detergents, cleaners and personal care products to:

- Carry active oxygen for bleaching
- Boost surfactant performance
- Stabilize enzymes
- Soften water
- Enhance stain removal
- Control viscosity or rheology
- Provide alkaline buffering
- Emulsify waxes or oils

Applications include:

Laundry detergents
Borates are used in a variety of household and industrial laundry detergent formulations. In powdered detergent, they can be directly incorporated to boost cleaning power or added as sodium perborate for bleaching action. They are also used in liquid detergents – enzymes for stain removal need to be stabilized in liquids, and borates have proven exceptionally effective for this.

Cleaning products
Borates or perborates are used in many household and industrial products for cleaning metals, glass, sinks, bathtubs, toilets, floors and machinery. They can also be found in automatic dishwashing detergents and powdered or liquid hand soaps.

Personal care products
Borates or perborates work in many personal care products such as cosmetic creams, skin lotions, hair shampoos, dyes and gels, eye drops, bath salts, and denture cleaners.

About U.S. Borax
U.S. Borax, part of Rio Tinto, is a global leader in the supply and science of borates—naturally-occurring minerals containing boron and other elements. We are 1,000 people serving 500 customers with more than 1,700 delivery locations globally. We supply 30% of the world’s need for refined borates from our world-class mine in Boron, California, about 100 miles east of Los Angeles. We pioneer the elements of modern living, including:

- Minerals that make a difference: Consistent product quality secured by ISO 9000:2001 registration of its integrated quality management systems
- People who make a difference: Experts in borate chemistry, technical support, and customer service
- Solutions that make a difference: Strategic inventory placement and long-term contracts with shippers to ensure supply reliability

About 20 Mule Team® products
20 Mule Team borates are produced from naturally occurring minerals and have an excellent reputation for safety when used as directed. Borates are essential nutrients for plants and key ingredients in fiberglass, glass, ceramics, detergents, fertilizers, wood preservatives, flame retardants, and personal care products.

20 Mule Team Borax products in detergents, cleaners and personal care products:

- Neobor® Borax Pentahydrate
- Borax Decahydrate
- Optibor® Boric Acids
- Dehybor® Anhydrous Borax
- Boric Oxide