

Karen Fletcher, Registration Specialist
Pesticide Registration Branch

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Sacramento

Phone : 445-4244

HSM 97003

Tareq A. Formoli, Associate Environmental Research Scientist
Worker Health and Safety Branch

[Original signed by T Formoli]

PRODUCT NAME: Super Puck; Prolong Service Tablets
ACTIVE INGREDIENT: Boron Sodium Oxide ($B_4Na_2O_7$) Penta-hydrate
COMPANY NAME: Bio-Lab, Inc.; Asepsis, Inc.
I.D. NUMBER: none
DOCUMENT NUMBER: none
EPA REGISTRATION NUMBER: 5185-460; 5185-460-10305
TITLE: Review for Insignificant Human Exposure

Super Puck and Prolong Service Tablets are identical products. These products contain two active ingredients: trichloro-s-triazinetriene (72.3%) boron sodium oxide ($B_4Na_2O_7$) penta-hydrate (6.8%). They are for use in floaters, automatic type feeders and skimmers to provide pool water sanitation. The labels recommend using 1 to 2 oz of the product for each 10,000 gallons of pool water as a maintenance treatment. Super Pack appears to be in the form of canisters also. Prolong Service Tablets are 3- inch tablets. These products are toxicity category I (Danger) pesticides, mainly because they are highly corrosive. Eye wear and rubber gloves are required when handling these products, mainly because of its corrosiveness.

The Registration Branch requested a review to determine if the use of these products according to the labeling would result in insignificant human exposure. Except for the product labels, no data were provided with this submission. While there are two active ingredients in these products, this review of exposure is limited to boron sodium oxide ($B_4Na_2O_7$) penta-hydrate only.

In May of this year, we reviewed a similar product (Synergy Tabs) by BioLab, Inc. that contained 5% disodium baborate penta-hydrate (DBP) in addition to 91.5% trichloro-s-triazinetriene. Based on the label recommendation for Synergy Tabs, DBP concentration in pool water was calculated to be 20.8 mg/L or 0.021 mg/cm³ DBP or 3.1 mg/L boron equivalent after two years. A model (US EPA's swim model) was used to estimate human exposure. In addition, boron levels in pool water was compared to the standard boron tolerance levels in drinking water reported in some literature. Consequently, an insignificant exposure recommendation was made for Synergy Tabs at that time. According to the label application rate of 2 oz per 10,000 gallons of pool water daily for Super Puck and Prolong Service Tablets, BSOP concentration in pool water would be 74.4 mg/L or 0.074 mg/cm³ or 11.3 mg/L boron after two years.

It appears that DBP, and BSOP ($B_4Na_2O_7$) are actually the same material and synonymous for sodium tetraborate penta-hydrate. However, its application rate according to the product labels for Super Puck and Prolong Service Tablets is almost 4 fold greater

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than that for Synergy Tabs. At these application rates, we will not be able to justify insignificant exposure without a supporting exposure study involving human subjects.

cc: Rich Bireley