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To: "NJinPAS Network" <NJinPASNetwork@AESOP.RUTGERS.EDU>
Sent: Thursday, July 15, 2004 7:10 PM
Subject: Zinc Pyrithione (Omadine Salts) Preliminary Risk Assessment

Action: EPA has released for public comment its preliminary human health and ecological risk assessment for zinc pyrithione (formerly known as omadine salts- see *below*) in support of the subsequent Reregistration Eligibility Decision (RED) document. Use the EPA EDocket query for OPP-2004-0147 @ <http://docket.epa.gov/edkpub/do/EDKStaffQuickSearchResults> to query for zinc pyrithione risk documents. Comments are due to EPA on or before August 30, 2004.

EPA states that zinc pyrithione is a **severe eye irritant** (Toxicity category I) but does not appear to demonstrate significant dermal irritation (Toxicity category IV), and is not a dermal sensitizer. In this preliminary assessment, commercial handler exposure was not of concern. Residential (i.e., homeowner) application of paints are of concern, and dermal and inhalation exposures are discussed.

EPA summarizes that 'zinc pyrithione is **very highly toxic on an acute basis to freshwater and marine fish and invertebrates, as well as to aquatic plant species**. It has been shown to cause adverse chronic impacts on freshwater and marine invertebrate reproduction and growth at very low concentrations. These adverse growth and reproductive effects indicate that zinc pyrithione **may be a potential human endocrine disrupter**'. EPA is requiring confirmatory ecological and worker exposure data, as well as neurotoxicity studies to be to be completed.

EPA notes that since this risk assessment is in the public review and comment phase, its findings are preliminary in nature and are subject to additional input through public comment and subsequent analysis. Accordingly, EPA will then develop a revised risk assessment and will be able to determine whether or not risk mitigation measures are needed. EPA will then document any uses of zinc pyrithione that are eligible for registration (as well as any risk mitigation measures needed) in the subsequent RED.

Background: Zinc pyrithione is an antimicrobial pesticide used as a materials preservative, as an antifoulant for boat paints, and as an industrial laundry additive. More specifically, Zinc pyrithione is conditionally registered as a pesticide active ingredient for incorporation into antifoulant boat paints to control the growth of slime, algae, and marine fouling organisms (e.g., barnacles, tubeworms, etc.) below the water line on boat hulls. This use is conditionally registered pending receipt of acceptable confirmatory data listed in this document's "Summary of Pending Confirmatory Data".

The largest use of zinc pyrithione is non-pesticidal (i.e., control of dandruff, seborrheic dermatitis, and psoriasis); it is the active ingredient in many anti-dandruff shampoos. These uses are regulated by the Food and Drug Administration; they are considered by the Administration to be 'safe and effective' for nearly 40 years.

Clarification: EPA changed the reregistration case name for this chemical from ``omadine salts" to ``zinc pyrithione" as "Omadine" is a registered trade name and the plural ``salts" referred to multiple actives of zinc pyrithione and tert-butylamine 2-pyridinethiol-1-oxide. Tert-butylamine 2-pyridinethiol-1-oxide is no longer a registered active ingredient.

Sources: [Federal Register: June 29, 2004 (Volume 69, Number 124)][Notices][Page 38895-38897] <http://www.epa.gov/EPA-PEST/2004/June/Day-29/p14706.htm>. See also 'Zinc Pyrithione Summary', and 'Overview of the Zinc Pyrithione Preliminary Risk Assessment' in the edocket for zinc pyrithione. See also 'EPA Pesticide Program Updates from EPA's Office of Pesticide Programs 07/06/04'.

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