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Sent: Sunday, July 04, 2004 5:40 PM
Subject: Metam Sodium Risk Documents for RED Released

Action: EPA has announced the availability of the human health and environmental fate and effects risk assessments and related documents for **metam sodium** (sodium N-methyldithiocarbamate). These risk assessments were developed as part of EPA's process for making pesticide Reregistration Eligibility Decisions (REDs) under Federal law. It is open for public comment on or before August 2, 2004 (as it is under a Natural Resources Defense Council consent decree deadline for publication of revised risk assessments by August 31, 2004). (To view the documents, go to the EPA EDocket via <http://www.epa.gov/oppsrrd1/reregistration/cycloate/>).

Background: Metam sodium (sodium N-methyldithiocarbamate) is a **dithiocarbamate salt** with fungicidal, herbicidal, insecticidal, and nematocidal properties. Metam-Sodium is the only fumigant that can be used prior to seeding or transplanting any food, fiber, or ornamental crop. Major agricultural use sites for metam sodium include potatoes, tomatoes, cotton, and carrots. Metam sodium is also registered for use on golf course turf, and for application to small areas of turf and soil. It is also registered as a root control compound for use in drains and sewers, and as an antimicrobial agent. No metam sodium products are intended for use by homeowners.

When metam-sodium or metam potassium is applied to soil, they quickly **decomposes to a gaseous fumigant, methylisothiocyanate (MITC)**, which is the active component. The major concern with metam sodium is the exposure of terrestrial and aquatic organisms to the degradate MITC. A subset of the dithiocarbamate pesticides (ziram and metam sodium) was determined not to share a common mechanism based on neuropathy. A RED for metam sodium/metam potassium will be a standalone document as EPA has not determined a common mechanism of toxicity with other materials. It is scheduled for completion in 2005.

Names for metam sodium include: A7Vapam , Basamid-Fluid , Carbam, Carbamic acid, Karbation , Maposol , Metam , Metam sodium , Metam sodium, dihydrate , Metam-fluid BASF , MITC precursor , N-869 , Sistan , Solasan 500 , Vapam , Woodfume Vapam.

Since metam sodium is considered to be a **potential methyl bromide (MeBr) replacement** as it is not an ozone-depleting compound, its use is expected to increase as use of known ozone depleter MeBr decreases. EPA cautions that the metam-sodium risk assessments are preliminary and that further refinements may be appropriate.

Sources: [Federal Register: June 2, 2004 (Volume 69, Number 106)][Notices][Page 31104-31106] <http://epa.gov/EPA-PEST/2004/June/Day-02/p12341.htm>. See also Methyl Isothiocyanate (MITC) - Wood Preservative @ <http://www.epa.gov/pesticides/factsheets/chemicals/methylf.htm>. See Metam-sodium Task Force Web Site@ <http://www.metampsc.com/>. 'Metam Sodium as an Alternative to Methyl Bromide for Fruit and Vegetable Production and Orchard Replanting' @ <http://www.epa.gov/spdpublic/mbr/casestudies/volume3/metams3.html>. EPA Memorandum 'The Determination of Whether Dithiocarbamate Pesticides Share a Common Mechanism of Toxicity' @ <http://www.epa.gov/oppsrrd1/cumulative/dithiocarb.pdf>.

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