



Maximum Residue Level (MRL) Question for REQUIEM® EC Insecticide

Will commodities treated with REQUIEM EC insecticide be accepted for import by EU, Japan and other countries without having an established MRL? In other words - does an MRL need to be established for a product and situation such as REQUIEM EC insecticide?

The U.S. Environmental Protection Agency (EPA) has established an exemption from tolerance for Terpene Constituents of the Extract of *Sida acuta* as Synthetically Manufactured (the active ingredient in REQUIEM) on all food commodities. This means that EPA has evaluated the health, safety, and residue data for REQUIEM and made a determination of safety. EPA has determined that a residue tolerance is not necessary to ensure dietary safety.

In addition to a favorable toxicity profile, the other key factor in EPA's determination of safety is that applications of REQUIEM leave no detectable residues on the treated crop. Residue studies, including two GLP field trials, demonstrate that no residues of the extract are detectable within an hour after application. Thus, there are no residues on which to base an MRL.

To summarize: AgraQuest believes there is no basis for an MRL; accordingly we believe an MRL is not required. Thus, we foresee no barrier to importation of REQUIEM-treated crops.

Moreover, the naturally occurring active components in REQUIEM insecticide are widely present in the environment, including many common foods. In the EU, MRLs are not set in these situations because residues from the pesticide application cannot be distinguished from natural levels. In the case of REQUIEM residue studies, the treated plants do not produce the natural compounds and foliar-applied REQUIEM is undetectable within hours of application.

In Japan, biopesticide products are subject to registration under the Agricultural Chemicals Law administered by MAFF. Under this Law, an MRL (or tolerance in US terms) is established if there is evidence that residues would occur at harvest. Historically, in instances where a residue standard has not been established in Japan, the authorities have referred to the standards of other countries and also the Codex standards for guidance. In the case of produce being imported from the U.S., the authorities have looked at the U.S. standards. For REQUIEM insecticide this means an exemption from tolerance or the equivalent of no MRL.

Considering that REQUIEM insecticide: (i) has been registered by the EPA as a biopesticide product; (ii) has been granted an exemption from the requirement of a tolerance; and (iii) leaves no detectable residues when applied to crops, we anticipate no need to establish an MRL and no barrier to importation of REQUIEM-treated crops is foreseen. This is similar to AgraQuest's experience with our other biopesticide products – SERENADE® and SONATA® fungicides. SERENADE fungicide is registered in the EU, Japan, and Canada and the authorities have determined that an MRL is not required. SONATA fungicide enjoys an exemption from tolerance in the U.S., is not registered in the EU, Japan, or Canada and an MRL has not been established or requested. Crops treated with either product are accepted for importation.