

## Polyether Trisiloxane Adjuvants FAQ

#### What are Polyether Trisiloxanes?

Polyether Trisiloxanes are a polymer group of organo modified silicones characterized by a Trisiloxane backbone structure with a single polyether attached in the side (pendant) position.

#### What is an Adjuvant?

An Adjuvant is a chemical product specifically added to a pesticide by users to improve the pesticide's efficacy. They are identified according to their intended purpose (examples: wetting agents, emulsifiers, dispersing agents). The U.S. Environmental Protection Agency (EPA) identified Adjuvants as "inert Ingredients" intentionally included in a pesticide for an approved purpose (see 40 CFR 152).

#### Why are Polyether Trisiloxanes used as Adjuvants?

Polyether Trisiloxanes are used as Adjuvants in pesticide products, since they decrease the surface tension thus reducing the tendency of spray droplets to bounce off plant foliage. This effect allows for better deposition and retention on plant surfaces and maximizes the performance of agricultural chemicals.

#### What are the benefits of Polyether Trisiloxanes?

Polyether Trisiloxane adjuvants are used in these applications to improve the efficacy of agricultural chemicals that control or eliminate unwanted pests and plant diseases, helping to improve plant health and subsequent yield.

#### How are Adjuvants regulated?

For Adjuvants that are included in pesticide formulations as "other ingredients," the EPA will in review the Adjuvant during pesticide registration and any necessary tolerances or exemptions from the requirement of a tolerance will be established. The registering authority (typically a State Pesticide Department) will require the Adjuvant to be registered and the associated product label to be approved prior to commercialization.

### Are Polyether Trisiloxanes safe for the environment?

Polyether Trisiloxanes have under gone testing to secure global regulatory approval for their use in crop protection products. Such approval processes establish appropriate and safe application and use practices.

### Can Polyether Trisiloxanes be safely used on food crops?

Polyether Trisiloxane adjuvants have been used successfully in agricultural applications for more than 25 years to protect the world's food supply.

# Does the Silicone Industry engage with the Agricultural sector, regulators, and farmers on advancing science and innovation?

The silicone industry collaborates closely with the agrochemical sector in the development of Trisiloxanes adjuvants to ensure they are both safe and effective. The industry also actively engages with the value chain, including farmers and regulators on product innovations and new science.

# What is the Silicone Industry doing to ensure Polyether Trisiloxanes are safe and effective in Agricultural applications?

The silicone industry is committed to the responsible use of silicones and continuously evaluates the science supporting the safety of silicone materials to ensure that silicones are safe when used as intended in their diverse and important applications, which contribute enormously to product quality, safety, and innovation.