

Socioeconomic Benefits of Silicones AGRICULTURE



Benefits

- Silicone products have been used successfully in agricultural applications for more than 25 years to help protect the world's food supply.
- Silicone products are used as wetting agents to increase the efficiency of pesticides and herbicides used for agriculture.
- Silicones improve the efficacy of agricultural chemicals that control or eliminate unwanted pests and plant diseases, helping to improve plant health and subsequent yield.
- Silicones decrease surface tension and reduce the tendency of spray droplets to bounce off plant foliage, thus allowing for better deposition and retention on plant surfaces and maximizing the performance of agricultural chemicals.



- The low surface tension of silicones allows the plants to absorb the pesticides / herbicides without requiring irrigation or rainwater so that fewer applications and smaller quantities of pesticides / herbicides are often needed.



Safety and Collaboration

The silicones industry has conducted extensive testing to secure global regulatory approval for their use in crop protection products.

Regulatory approval processes establish appropriate and safe application and use practices.

The silicones industry works to ensure silicone products (trisiloxanes) are both safe and effective and collaborates closely with:

- The agrochemical sector in the development of trisiloxane surfactants;
- Regulators, and;
- The value chain (including farmers) on product innovations and new scientific research.

Without
Silicone
Adjuvant



With
Silicone
Adjuvant



Applications

Silicone products act as superspreader surfactants that possess the unique ability to significantly reduce the surface tension of water. This promotes rapid spreading of aqueous solutions on leaf surface.