

Unlock new opportunities with UltiLoc™ water-soluble films



Discover new levels of convenience, safety, and stability in extreme packaging applications

Heightened safety awareness, environmental concerns, and the need for improved efficiencies fuel the demand for water-soluble film packaging. Today, you and your customers expect water-soluble film to deliver convenience, reduced packaging, no-waste dosing, fast dissolution in water, and avoidance of direct exposure to chemicals for improved handling safety. UltiLoc water-soluble film from Sekisui delivers these benefits – and more.

Based on Sekisui patented copolymer technology, next-generation water-soluble UltiLoc film is environmentally friendly and decomposes quickly into water and carbon dioxide, leaving no ecotoxic residue. It can package strong oxidizers and concentrated surfactants safely, as well as store them longer, even in hot, humid conditions. UltiLoc film also enables you to achieve more than is possible with conventional polyvinyl alcohol (PVOH) film, offering you the following distinct advantages:

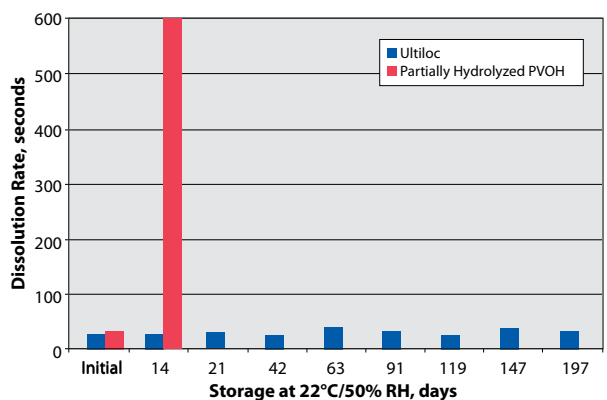
- Package concentrated liquids, powders, or tablet formulations without compromising handler safety;
- Extend the storage of moderate-to-strong oxidizers and concentrated surfactants longer than with PVOH film;
- Reduce distribution costs across supply chains.



Improved compatibility over PVOH

Polyvinyl alcohol is a popular choice for water-soluble films. However, it offers limited compatibility and storage stability, particularly with moderate-to-strong oxidizers. Sekisui research shows that UltiLoc compatibility with trichloroisocyanuric acid extends storage stability to more than 28 weeks – well beyond the limits achievable with PVOH film. Partially hydrolyzed PVOH film fails within two weeks.

UltiLoc significantly outlasts PVOH film when storing industrial disinfectant and bleaching agent, trichloroisocyanuric acid



The dissolution rate for UltiLoc packaging of trichloroisocyanuric acid at 22°C and 50% relative humidity remains consistently low up to 197 days, while the dissolution rate for partially hydrolyzed PVOH film jumps to 600 seconds after just 14 days under the same conditions.

Markets and applications		
Market	Application	Sample chemicals
Household	Bleaches, detergents, disinfectants	Surfactants, enzymes, sodium percarbonates
Industrial and institutional	Bleaches, detergents, disinfectants, dyes, pigments	Dichloroisocyanurate, sodium perborates, brominated and chlorinated hydantoins
Agriculture	Crop protection chemicals, insecticides, herbicides	Imidacloprid, nitrogen/phosphate fertilizers
Water treatment	Bacteria and enzyme treatments, spas and pools	Isothiazoline, trichloroisocyanurate, potassium monopersulfate, dichloroisocyanurate

Package stronger oxidizers safely, extend market reach

UltiLoc technology also offers numerous manufacturing and distribution benefits for reduced costs and improved safety. For example, packaging powdered forms of cleaning concentrates with UltiLoc film provides efficiencies in shipping, storage and disposal costs compared to the liquid form. Additionally, the UltiLoc film packaging protects the user from exposure to the potentially hazardous contents.

With its unparalleled performance characteristics, UltiLoc extends the range of potential applications for water-soluble films, particularly those underserved by PVOH film. Markets that require longer, more flexible transport and storage timeframes for stronger oxidizers and chemicals can now turn to UltiLoc film to package their products safely.

Convenient packaging and customization

UltiLoc water-soluble film is heat sealable and printable, enabling you to customize your product easily during manufacturing. It pouches on conventional vertical form, fill, and seal (VFFS) equipment, with highly competitive performance and packaging characteristics.

Contact Sekisui for more information:

To learn more about UltiLoc or to request product samples, please visit www.sekisui-sc.com.

Sekisui Specialty Chemicals America, LLC
1603 West LBJ Freeway, Suite 200
Dallas, TX 75234
Phone: 972-277-2901
Fax: 972-277-2909



Global registrations/approvals

The resin used to make UltiLoc is approved as an ingredient in pesticide formulations and packaging in the following regions of the world:

- United States (TSCA)
- Canada (DSL)
- Europe - underway
- Japan - underway