

OS431 Defoamer

DESCRIPTION

OS431 Defoamer is a non-silicone defoamer that is particularly well suited to controlling foam in aqueous dry film developing solutions and stripping solutions. OS431 is unique because it is water soluble at the concentrations at which it is normally used for defoaming solutions. This means that unlike many other defoamers, no oily film will be left on parts processed in solutions defoamed with OS431. Furthermore, any OS431 that might be carried over on the parts into subsequent rinse tanks will completely dissolve in the rinse water, thereby preventing oily films from accumulating on the surface of the rinse water. OS431 is used at low concentrations. Therefore, it is economical to use.

OPERATING PARAMETERS

Concentration	¼ to 3 mls per gallon
Temperature	Ambient (60°F) to boiling

PHYSICAL PROPERTIES

For defoaming solutions containing water-soluble solvents, such as butyl carbitol, 1 to 3 mls per gallon OS431 is usually satisfactory. For defoaming solutions containing no water-soluble solvents, 1/4 to 3 mls per gallon is typical.

For many applications it may be desirable to pre-dissolve OS431 into the water before it is heated, then add the developer or resist stripper chemistry, and then heat the solution to operating temperature. The solubility of OS431 increases dramatically at lower temperatures. At 86 F (30 C) its solubility is 2 to 4 ml per gallon of water. At 68 F (20 C) its solubility is over 100 ml per gallon of water. The cooler the water, the faster and more easily OS431 will dissolve into it.

CONTROL PROCEDURES

In operations that introduce foam-causing agents into the bath as parts are processed, such as resist developing and stripping, periodic additions of OS431 may be required to counteract the freshly introduced foaming agent. Add OS431 as required to keep foam under control. OS431 is very viscous. To obtain maximum foam control, be sure that the defoamer is thoroughly mixed with the foaming solution. When the bath contains water-soluble solvents, such as butyl carbitol, OS431 may be premixed with the solvents to permit easier dispersion of the defoamer in the bath.

SAFETY AND STORAGE

OS431 may be used at the recommended concentrations in equipment made of polyvinyl chloride, polypropylene, polyethylene, Teflon, glass, and all common structural metals.





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Product Data Sheet

OS431 is considered non-hazardous by current standards. Good industrial hygiene procedures dictate that skin and eye contact should be avoided. Do not take internally.

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