

**D-SOLV**  
**Biomass Dispersant**

The growth of bacteria and fungus in metalworking fluid systems can result in fluid degradation, the fouling of fluid lines and rank odors. One of the more visual effects of microbial contamination is the adherence and growth of biofilms on solid surfaces in the system. The biofilm consists of microbial cells and the extracellular biopolymer that the organisms produce. Once a biofilm is established on a surface, numerous problems can arise, including reduced heat transfer efficiency, fouling, corrosion and scale. Likewise the biofilm, which houses the colonized organisms, will act as an additional source of contamination to the metalworking fluid. Once established, the biofilm will become more complex and often filamentous in nature. As the matrix develops, it will begin to accumulate debris such as swarf or other extraneous material, and eventually will impede or completely block the flow of metalworking fluid.

D-SOLV is a chemical amide that provides an economical chemical treatment to break loose and disperse biological foulants in metalworking fluid systems.

D-SOLV is not an antimicrobial agent. Field studies show that a combination of D-SOLV to remove biofilm and Coolant Conditioner 20 can provide both preventive and corrective treatment for fouled systems.

**Application** – For systems fouled with microbiological deposits, slowly add 150-400 ppm (80-160 ml) D-SOLV to a well-agitated section of the system. For best results, D-SOLV should be diluted with water prior to addition to ensure adequate mixing.

After 24 to 48 hours, the operator should notice the following important phenomena:

- Odors associated with microbiological fouling may increase.
- Bacterial and fungal counts in the metalworking fluid may increase substantially.
- System foaming tendencies may increase moderately.
- System filter media may become plugged more rapidly.

All of these conditions are temporary and should be expected. They are the result of D-SOLV penetrating and dispersing microbiological based deposits in lines, nozzles, and sumps. After the deposits are penetrated and dispersed, they become part of the bulk metalworking fluid. Microbiocides should be added to the system to control the microbe population. Depending on the degree of fouling, treatment with D-SOLV may be required prior to microbicide addition over an extended period of time.

**Physical Properties**

Density at 25°C (77°F)	0.90 g/cm <sup>3</sup>
Weight per Gallon	7.5
Volume per lb	505 ml
Volume per kg	1110 ml
pH	6.5-7.5
Flash Point	<100°C (212°F)

**Packaging and Handling** – D-SOLV is a liquid packed in pails, quarts, and gallons. Refer to the Material Safety Data Sheet for suitable materials of construction, for handling and storing instructions.

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