

Product Information

PC-197

PRODUCT DESCRIPTION :

PC-197 is a low viscosity, non-ionic, ethylene oxide trisiloxane exhibiting low surface tension which enhances wetting on virtually any surface. For example, PC-197 is one of only a few surfactants capable of wetting PTFE ("Teflon") surfaces. Very low concentrations of PC-197 surfactant can reduce the surface tension of water from 72 to as low as 20.5 dynes/cm². Flow and leveling of water based products such as ink and coatings, pesticides, cosmetics and sheeting action in detergents are improved with the addition of PC-197. It is also an excellent, low flash, fugitive, viscosity modifier in coatings that are thermally cured.

PC-197 surfactant is an excellent spreading and wetting agent. This is due in part to its ability to significantly lower equilibrium surface tension. The small size of the silicone backbone plays a unique role in spreading. Because of its small particle size, PC-197 spreads better than conventional organic surfactants and many fluorocarbon surfactants. Wetting and spreading ability in coatings is directly related to flow. Spread-out in aqueous resin coatings, cosmetic formulations and sheeting action in detergent systems is enhanced with PC-197. The low surface tension and spreading ability of PC-197 allows aqueous pesticides to infiltrate stomata on a leaf's surface allowing the active ingredients to penetrate into the leaf's interior.

TYPICAL PROPERTIES *

| PROPERTY | VALUE | UNIT |
|----------------------------------|-------------------|-------------------------|
| APPEARANCE : | Clear Light Amber | - |
| ODOR : | Polyether | - |
| SOLIDS CONTENT : | 100 | % |
| VISCOSITY @ 25°C (77°F) : | 20 | CPS (Brookfield) |
| SPECIFIC GRAVITY @ 25°C (77°F) : | 1.03 | g/ml |
| SURFACE TENSION@ 25°C (77°F) : | 21 | Dynes / cm ² |
| MOLECULAR WEIGHT : | 600 – 800 AVG | - |
| FLASH POINT : | 100 / 212 | °C / °F |

*: THE ABOVE INFORMATION IS GIVEN ONLY AS A LISTING OF TYPICAL PROPERTIES AND IS NOT INTENDED TO BE REPRESENTATIVE OF PRODUCT SPECIFICATIONS. PLEASE CONTACT THE QUALITY ASSURANCE DEPARTMENT FOR CURRENT PRODUCT SPECIFICATIONS.

APPLICATIONS :

Cosmetic: Improves wetting of virtually all aqueous based products.

Paints, coatings & inks: Minimize cratering and fish-eyes in waterborne applications.

Improve flow and can lower viscosity of organic coatings.

Increase slip and mar resistance.

Household: Cleaners/detergents to enhance sudsing, water wet-out and sheeting, glass cleaners.

Agricultural: Pesticides, liquid fertilizers, herbicide.

Textile: Lubricant, anti-stat. leveling agent.

SPECIFICATIONS:

Typical product data values should not be used as specifications. Assistance in the preparation of specifications are available by contacting your local Performance Chemicals Representative.

HANDLING AND SAFETY:

Silicone fluids should be stored in tightly sealed containers to prevent free water and particulate contamination from entering the container. Store sealed containers in a dry area at temperatures below 25°C (77°F) or below.

Safety Data Sheets (SDS) are available upon request. Similar information for solvents or other chemicals or materials used with Performance Chemicals' products should be obtained from your suppliers. When solvents and other chemicals are used, proper safety precautions and regulations must be observed.

PC-197 - fluids have a very low level of toxicity, however, they are an eye irritant. Take proper precautions to protect the eyes from the silicone fluid by wearing proper safety glasses and face shields. Avoid touching eyes or area around the eye when handling or working with silicone fluids. Refer to the PC-197 SDS for specific information.

Product sold for industrial use only and is not suitable for any device or product inserted inside a human being and may not be suitable for other medical applications.

STORAGE WARRANTY / SHELF LIFE PERIOD:

The shelf life period is 12 months from the date of shipment if stored in the original unopened container at 27C/80F or below.

PACKAGING:

PC-197 - fluids are available in bulk, 275 gallon totes, 55 gallon drums and 5 gallon pails.

WARRANTY INFORMATION:

The information contained herein is provided in good faith and is believed to be accurate. Because methods of use and conditions of use of our products are beyond our control, this information should not be used in substitution for customer testing to insure the product safe and fully satisfactory for the intended use. Performance Chemicals' sole warranty is that the product meets the sales specification in effect at the time of shipment and accepts no liability in negligence or otherwise for any damage resulting from the user reliance on information or recommendations written or verbal. Performance Chemicals specifically disclaims any other express or implied warranty of fitness for a particular purpose or use and disclaims any liability for any incidental or consequential damages. Any suggestions of use shall not be taken as inducements to infringe any patent. **Revised 2-15; Supersedes:10-13.**