

Toynol® Multifunctional Surfactants

FS-204 Series of Defoaming Wetting Agents

Features

- Foam control wetting agents are adapted to waterborne systems
- Improve the ability to wet various substrates under dynamic condition
- Effectively reduce surface tension, control foam and stable viscosity
- With the multifunction of wetting, defoaming and improving dispersibility of pigment
- Lower static and dynamic surface tension
- Enhance flow and leveling
- Free APEO , non-toxic

Chemical Compositions

Acetylenic Diol-based Surfactants (Nonionic)

Recommended Application

- Waterborne inks or varnish
- Waterborne non-stick coatings
- Waterborne automotive coatings
- Can coatings
- Waterborne adhesives
- Latex products
- Fountain solutions

Application Benefits

- Reduces coating's dynamic/static surface tension and enhances coating's wetting and dispersive ability to substrates and pigment
- Enhance coatings' coverage ability to substrates
- Ability to sustained control foam/defoam in the course of production and application
- Can be adapted to high-speed coating
- Stable in high electrolyte systems

Packaging/Handling

Toynol is available in 25L and 220L containers.

Storage

This product should be sealed and placed in a dry, cool, well-ventilated place at room temperature away from fire source. For any other information, please refer to MSDS.

Typical Properties			
Types	FS-204	FS-204E	FS-204BE
Appearance	Pale Yellow to White Waxy Solid	Clear, Pale yellow liquid	Clear, Pale yellow liquid
APHA Color	<350	<350	<350
Active Content	100%	50%	50%
Foam Property	Defoam	Defoam	Defoam
Solubility	-	-	-
surface tension (0.1%)	1b/s	32.8	40.5
	6b/s	33.3	41.5
Notes: 1b/s static, 6b/s dynamic			

Direction for Use

1. In the formulation or mix procedure, maintain adequate agitation and allow mix times of at least 15-30 minutes. More suitable heat added if the viscosity rises.
2. Add Toynol surfactants last, especially after other surface active agents or polymeric materials have been added. This will allow the maximum rate of dissolution or dispersibility of Toynol surfactants into the system.
3. Better add the pigment, filler and other solid material before Toynol. Its favorable for wetting solid and controlling the production of foam while agitating.
4. Toynol is a multifunction product which can substitute one or more formulas additive. However, optimal concentration levels should be determined by running a ladder study.
5. Sometimes, Toynol fluid mixture will have agglomeration or crystal while transporting and storing under low temperature. Then if heated to the hot spots, it can be recover after modest agitate.

Addition Levels: 0.2%-2%

All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto. This manual can not serve as any legal material.