



NUMBER 4415-4 (Supersedes 4415-3)

Strodex™ TH-100 phosphate ester surfactant

For waterborne architectural coatings

Strodex TH-100 surfactant is a specialty surfactant based on a neutralized (potassium salt) form of a phosphate ester of aliphatic alcohol. It is designed to impart superior stability to latex paints, including mechanical stability as well as heat and freeze-thaw stability. Strodex TH-100 surfactant can improve color float resistance in latex paint formulations. Depending on the formulation specifics, Strodex TH-100 surfactant can also function as a dispersant aid and help reduce pigment flocculation. Strodex TH-100 surfactant does not contain any alkyl phenol ethoxylates (APEOs).

In addition to use in latex paint, Strodex TH-100 surfactant provides benefits in universal colorants. It helps disperse and stabilize pigments, thereby enhancing color acceptance for water-based paints tinted at the point-of-sale.

Typical Properties^(a)

Chemical type:	Phosphate Ester (anionic)
Appearance:	Slightly hazy liquid
Active solids, weight %:	81 ± 2.0%
Active solids, volume %:	80.9% ± 2%
Solids, weight %:	87.0% ± 1%
Solids, volume %:	86.5% ± 1%
Water, weight %:	13.0 ± 2%
Water, volume %:	13.5 ± 2%
Gardner Color:	3 maximum
Viscosity ^(b) , as supplied (cps or mPa-s):	200 - 400
Cloud point °F (°C) (neat):	~70 (21)
Density, g/mL:	1.07
Density, lb/gal:	8.9
pH, as-is solution:	8.5 - 9.5
Flash point ^(c) :	>200°F (93°C)

^(a)Values are typical properties and are not to be regarded as product specifications.

^(b)Brookfield RVT viscosity at 25°C (77°F).

^(c)Tag closed cup

Product Benefits

- Increased gloss
- Improves color acceptance
- Excellent wetting and dispersion of pigments
- Improves substrate wetting
- Reduces color float
- Improves heat stability
- Improves freeze-thaw resistance
- Inhibition of flash and nail head rusting

Recommended Use Levels

- In flat, semi-gloss and gloss paints, 2-5 pounds of Strodex TH-100 surfactant per 100 gallons of finished paint are recommended.
- In universal colorants, 5-8% by weight of Strodex TH-100 surfactant is recommended.



Handling Precautions

Under normal storage conditions (between 32°F / 0°C and 100°F / 37°C in closed packaging), Strodex™ TH-100 surfactant has good chemical stability and has a recommended shelf-life of two years. However, Strodex TH-100 surfactant can exhibit a low temperature cloud point, where formation of an opaque layer can occur with storage at temperatures less than ~ 70°F / 21°C. To ensure homogeneity, it is recommended that Strodex TH-100 surfactant be preheated to ~ 90°F / 32°C or stirred / recirculated before use. Review the Safety Data Sheet (SDS) for additional information. Strodex TH-100 does not require protection from freezing but should be mixed prior to use after freeze-thaw cycling.

Packaging

Strodex TH-100 surfactant is available in 5 gallon pails, 55 gallon drums and Intermediate bulk containers (IBCs). Samples are available in 4 oz. (100ml), 0.5 pint (250ml) and 1 qt. (1 liter) quantities.

Volatile Organic Compounds (VOCs)

Strodex TH-100 surfactant is formulated as solvent-free. As such, the VOC content of this product should be non-detectable using the standard U.S. EPA Reference Method 24.

APEO Content

Strodex TH-100 surfactant does not contain any alkyl phenol ethoxylates (APEOs).

Chemical Inventories

All components of Strodex TH-100 surfactant are listed on TSCA chemical inventory (USA) and Canadian DSL as well as EINECS compliant.

Product Safety

Ashland maintains Safety Data Sheets of all of its chemical products. Safety Data Sheets contain health and safety information relevant for your development of appropriate product handling procedures to protect your employees and customers. Our Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Ashland products in your facilities.