

DEE FO PI-45

ANTIFOAMING/DEFOAMING AGENT FOR AQUEOUS INKS, PIGMENT DISPERSIONS AND OVERPRINT VARNISHES

GENERAL DESCRIPTION AND PRODUCT FEATURES: DEE FO PI-45 is an extremely effective defoamer that utilizes the latest cutting edge foam control technologies. DEE FO PI-45 was developed to provide the following benefits:

- 1. Excellent grind and pigment process aid.
- 2. Eliminate microfoam in high shear press and metering system(s) including long-term effectiveness during lengthy high shear press runs.
- 3. Easy to incorporate while providing long-term persistence.
- 4. Superior substrate compatibility by eliminating film defects.
- 5. Improve leveling on high hold out substrates (such as paper, flexible films and foils).

DEE FO PI-45 will not interfere with essential ink film properties such as hardness, adhesion, gloss, clarity and chemical resistance.

APPLICATIONS: For Flexographic and Gravure applications, DEE FO PI-45 can be added in the letdown process at 0.1% to 0.4% utilizing a common lab mixer running at approximately 750 rpm for 5 to 10 minutes. These applications include pre-print, multi-wall bag, tag and label, film and foil and overprint varnish. Other applications such as newsprint and corrugated may require 0.4 to 1.0% dosage levels.

SPECIFICATIONS: (Revision Date: 09/14/99)

Appearance Translucent, off-white liquid

Viscosity (Brookfield RVF, 2500 to 5000

Spindle #4, 20 RPM, 25°C) cps

Weight per Gallon, pounds 8.35 to 8.55 pH 7.0 to 8.5 % Non-Volatile by Weight 63 to 67

TYPICAL PROPERTIES:

Flash Point, PMCC/°C >204

Specific Gravity @ 25°C (Theoretical)

SHIPPING CONTAINERS:

57 Gallon Poly Drum
5 Gallon Pail
480 Lbs. Net per Drum
42 Lbs. Net per Pail

HANDLING AND STORAGE: Store at room temperature. Avoid prolonged storage above 43°C (110°F). If frozen or stored above 43°C, return to room temperature and mix thoroughly before use. Refer to Material Safety Data Sheet for additional safety and handling information.

Revised: 12/16/03

Previously Revised: 07/24/01

1.002 to 1.026

Page 1 of 2





DEE FO PI-45

SOLIDS AND VOLATILES CONTENT

Solids, weight % 65.0% VOC, weight % 0.8% Water, weight % 34.2% VOC, grams/liter 8.1

HAZARDOUS COMPONENTS

Ozone depleting substances

Hazardous air pollutants

None
Heavy metals

CONEG status

Alkyl, nonyl phenol ethoxylates

Tin, organotin compounds

Other endocrine disruptors

None

TOXIC SUBSTANCES CONTROL ACT (TSCA) REQUIREMENTS

Section 5(e) or 5(f) consent order

Section 12(b) - export notification

Other

None

FDA (21 CFR) CLEARANCES

Call Ultra Additives for other FDA clearances.

175.105 Adhesives

176.170 Components of paper and paperboard/aqueous & fatty foods

176.180 Components of paper and paperboard/dry food

176.200 Defoaming agents used in coatings

176.210 Defoaming agents used in manufacture of paper & paperboard

Other

Yes

Yes

Yes

Yes

176.180 Components of paper and paperboard/dry food

Yes

176.210 Defoaming agents used in manufacture of paper & paperboard

No

Call

Note: Defoamers that clear 176.200 may be used in components intended to clear 176.170 and 176.180.

ANIMAL DERIVED COMPONENTS

Contains animal derived products: No Kosher: Yes

PESTICIDE CLEARANCES

Exemption from requirement of a tolerance

Not

40 CFR 180.1001, paragraph(s): determined

Not

Pesticide Inert Ingredients List determined