# 21 Series
## High Solids Epoxy Topcoat
### Technical Data Sheet

**Product Group**

Epoxy topcoat

**Characteristics**

Product Information

- This chemically cured two-component topcoat is designed to provide maximum protection from various chemicals, hydraulic fluids, aviation fuels, phosphate ester (Skydrol®) fluids and corrosion causing media. This high solids technology meets the VOC requirements of SCAQMD Rule 1124 and is available in gloss, semi-gloss and flat finishes.

**Components**

Curing Solution

Gloss Curing Solution X-530
Semi-gloss Curing Solution X-462
Flat Curing Solution X-541

**Specifications**

Qualified Product List

| | |
|---|---|
| Air France | SMI 70 084-1 |
| Allied Signal Aerospace | EMS 93284 C Cl A (AiResearch Los Angeles Div.) (color specific) |
| Boeing Long Beach | DMS 2433, Type I, Comp C |

For most recent up-date or missing specifications please check the qualified product list (QPL) on **www.akzonobel.com/aerospace**

**Surface Conditions**

Cleaning

- Surface pretreatment is an essential part of the painting process
- Apply only over fresh or reactivated primer surfaces. Review recommended primer products for substrate to be coated.



AkzoNobel Aerospace Coatings
1 East Water Street, Waukegan, IL 60085, USA - Phone (847) 623 4200, Fax (847) 625 3200
Rijksstraatweg 31, 2171 AJ Sassenheim, The Netherlands - Phone (31) 71 308 2905, Fax (31) 71 308 2056
Internet: www.akzonobel.com/aerospace

# 21 Series
## High Solids Epoxy Topcoat

### Instruction for Use

| | |
|---|---|
| Mixing Ratio (volume) | Gloss<br>3 parts Base 446-21 Series<br>1 part Curing Solution X-530<br>Semi-gloss<br>3 parts Base 456-21 Series<br>1 part Curing Solution X-462<br>Flat<br>3 parts Base 466-21 Series<br>1 part Curing Solution X-541 |
| | - Stir or Shake until all pigment is uniformly dispersed before adding curing solution.<br>- Stir the catalyzed mixture thoroughly. |
| Induction Time | 15 minutes |
| Initial Spraying Viscosity (25ºC/77ºF) | 17 □ 30 seconds Zahn-Cup #2 |
| Note | Viscosity measurements are provided as guidelines only and are not to be used as quality control parameters. Certified information is provided by certification documentation available on request. |
| Pot life (25ºC/77ºF) | 4 hours |
| Dry Film Thickness (DFT) | 1.0-1.5 mils<br>25-37 microns |



AkzoNobel Aerospace Coatings
1 East Water Street, Waukegan, IL 60085, USA - Phone (847) 623 4200, Fax (847) 625 3200
Rijksstraatweg 31, 2171 AJ Sassenheim, The Netherlands - Phone (31) 71 308 2905, Fax (31) 71 308 2056
Internet: www.akzonobel.com/aerospace

# 21 Series
## High Solids Epoxy Topcoat

### Application Recommendations

| | |
|---|---|
|  Conditions | Temperature: 15 – 35°C<br>59 – 95°F<br>Relative Humidity: 35 – 75% |
|  Note | The quality of the application of all coatings will be influenced by the spray equipment chosen and the temperature, humidity, and air flow of the paint application area. When applying the product for the first time, it is recommended that test panels be prepared in order to identify the best equipment settings to be used in optimizing the performance and appearance of the coating. |
|  Equipment | Airless, air assisted airless, conventional spray or HVLP spray |
|  Number of Coats | Spray a single wet coat. Allow 15 minute solvent flash and apply a second wet coat. |
|  Cleaning of Equipment | MEK or TR-19 |



AkzoNobel Aerospace Coatings
1 East Water Street, Waukegan, IL 60085, USA - Phone (847) 623 4200, Fax (847) 625 3200
Rijksstraatweg 31, 2171 AJ Sassenheim, The Netherlands - Phone (31) 71 308 2905, Fax (31) 71 308 2056
Internet: www.akzonobel.com/aerospace

# 21 Series
## High Solids Epoxy Topcoat

### Physical Properties

| | | |
|---|---|---|
| Drying Times (25 +/- 2ºC / 77 +/- 2ºF, 55 +/- 5% RH) | Tack free | 4 hours |
| | Dry through | 9 hours |
| Theoretical Coverage | 250-400 $ft^2$/gal based on 50% transfer efficiency<br>6-10 $m^2$/l based on 50% transfer efficiency<br>Varies with color | |
| Dry Film Weight | Gloss | 44.5 g/$m^2$/25.4 micron<br>0.0091/lbs/$ft^2$/1.0 mil |
| | Semi gloss | 47.6 g/$m^2$/25.4 micron<br>0.0098/lbs/$ft^2$/1.0 mil |
| | Flat | 46.8 g/$m^2$/25.4 micron<br>0.0096/lbs/$ft^2$/1.0 mil |
| Volatile Organic Compounds | Max 420 g/l (per US Calculations)<br>Max 3.5 lb/gal | |
| Gloss (60º) | 446-21 Series | 90 gloss units minimum |
| | 456-21 Series | 15-30 gloss units |
| | 466-21 Series | 6 gloss units maximum |
| Color | As required | |



AkzoNobel Aerospace Coatings
1 East Water Street, Waukegan, IL 60085, USA - Phone (847) 623 4200, Fax (847) 625 3200
Rijksstraatweg 31, 2171 AJ Sassenheim, The Netherlands - Phone (31) 71 308 2905, Fax (31) 71 308 2056
Internet: www.akzonobel.com/aerospace

# 21 Series
## High Solids Epoxy Topcoat

Flash-point

| | |
|---|---|
| 446-21 | -4ºC / 25ºF |
| 456-21 | -4ºC / 25ºF |
| 466-21 | -4ºC / 25ºF |
| X-530 | 7ºC / 45ºF |
| X-462 | 7ºC / 45ºF |
| X-541 | 7ºC / 45ºF |

Storage

Store the product dry and at a temperature between 5 and 38ºC / 40 and 100ºF per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature may vary per OEM specification requirements. Refer to container label for specific storage life information.

Shelf life
5 - 38°C
(40 - 100°F)

12 months per AkzoNobel Aerospace Coatings commercial specification. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

**Safety Precautions**

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDS's are available on request.

**Issue date: January 2015 (supersedes July 2009) - FOR PROFESSIONAL USE ONLY**





AkzoNobel Aerospace Coatings
1 East Water Street, Waukegan, IL 60085, USA - Phone (847) 623 4200, Fax (847) 625 3200
Rijksstraatweg 31, 2171 AJ Sassenheim, The Netherlands - Phone (31) 71 308 2905, Fax (31) 71 308 2056
Internet: www.akzonobel.com/aerospace