PRODUCT DATA SHEET

A-A-341A ALUMINUM PASTE

PTI ALUMINUM DISPERSIONS

DESCRIPTION

A-A-341A is a leafing aluminum tint paste. This aluminum paste is intended for dispersion in multiple protective coating types. It is imperative that you read the dispersion instructions, below, thoroughly before using this product.

SPECIFICATIONS

- TT-P-320 TYII CL.A
- A-A-341A TYII CL.A
- ASTM D962 TYII CL.A

COATING PROPERTIES & CHARACTERISTICS

Weight (lbs per gallon)	13.29 LBS
Coatings VOC	478 g/L

SHELF LIFE

Shelf life is only applicable for materials stored in unopened and undamaged original factory filled containers.
1 year when stored between 50°-85° Fahrenheit.

DISPERSION INSTRUCTIONS

Aluminum pigments require certain handling and incorporation techniques that need to be followed to achieve proper dispersion. Aluminum pigments are unlike any non-metallic used for coatings and, as such, must be handled differently to maximize their utility. Because aluminum pigments are flakes and are rather fragile, the use of severe dispersion techniques should be avoided. Ball milling or sand milling would completely destroy the integrity of the flake, resulting in a much finer, darker finish. Likewise, high speed dispersion equipment, such as Cowles dissolvers, should be avoided. These very high speed dispersers, when run at high speed, will deform the flake by either fracturing it or folding and bending it. When this happens, the resultant coating will generally be grayer, exhibit less hiding, and may also be very gritty. The color change would be due to a change of orientation of the flake in the film, while the loss of hiding and grittiness are related to the deformation of the flake, and the resultant decrease in the flake surface area.

Silberline's recommended procedure for dispersion is to add to a mixing tank containing aluminum paste one third to no more than one half the weight of the paste, with solvent. In some instances, the paste can be soaked with either resin only, or a resin/solvent blend. The paste should be broken up uniformly in the mixing tank to allow the solvent, resin, or solvent/resin blend, to soak into a greater amount of surface area. This soak time will vary as coarser grades of aluminum typically require less time than finer grades. Proper soaking will aid in reducing the actual dispersing or mixing time, as well as increase the ability to manufacture a coating that is consistent for color, opacity, and texture.

A low shear mixing blade of at least one third to one half the diameter of the mixing tank should be sufficient to disperse the paste. Mixing should be done at low speed to reduce this mixture to a thick, creamy consistency. At this point, most of the flakes will be separated from one another by a thin layer of solvent or vehicle. When this smooth "milkshake-like" consistency has been achieved, with no soft agglomerates present, further reduction with

another addition of solvent may be made. This second addition should be no more than the amount added for the initial soak period. This also should be mixed at slow speed: long with scraping of the sides of the tank if possible to further incorporate the mixture into a smooth consistency. This technique should eliminate dispersion difficulties and minimize related problems. **The key is the initial soak time to soften the paste.**

SOLVENT SELECTION

Leafing Products

Aliphatic and aromatic hydrocarbons are the preferred solvent. Polar solvents should be avoided due to their adverse affect on leafing stability.

Non-Leafing Products

Polar solvents, i.e. alcohols, esters, ketones, having low surface tension are preferred to provide ideal wetting properties of the flakes.

NOTE: Application of PTI products requires the use of all OSHA approved safety equipment, including proper ventilation. Additionally, PTI products require the recommended temperature/humidity conditions and film thickness ranges for optimal performance. The material, hangar, and aircraft skin temperatures should be no lower than 75° F / 25° C before, during and after application.

HEALTH, SAFETY, & STORAGE REQUIREMENTS

Refer to each individual material SDS (Safety Data Sheet) for specific requirements on the health, safety, storage and handling requirements. Follow all local, state, and national regulations during surface preparation, material application and cleanup.

PRODUCT INFORMATION & DISCLAIMER

Product Data Sheets are periodically updated to reflect new information. It is important to use the latest and most recent revision for the product being used. The foregoing information is accurate to the best of our knowledge. However, due to differences in customer handling, use and method of application which are not known and are beyond our control, Products Techniques, Inc. makes no warranties as to the end result.