



NYCOTE APPLICATIONS CASE STUDY: NYGONE SURFACE COATING REMOVER

In the aerospace industry, protective coatings – organic, inorganic, chemical conversion or metallic – are the first line of defense against corrosion. Due to aging and the need to inspect the material under a coating, many of these coatings eventually require removal and reapplication. If the coating is improperly removed or removal damages the substrate/part, the results can be dangerous and costly.

Nygone remover was created to resolve the issues related to the safe removal of cured polymer, resins, and conformal coatings. Nygone will effectively remove most coating products without part damage, thus allowing the user a safe and simple removal method.

Currently, many cleaning and removal products are being banned from the market due to their harsh ingredients and toxicity levels. Current formulations on the market sometimes contain benzene mixtures using aromatic solvents. Aromatics are known to emit air pollutants and are toxic. Nygone removes coatings easily and without harsh toxic ingredients. There is a need in the market for coating removal compositions that are safe for people and the environment and biodegradable, while having the strength to remove coatings from various surfaces, such as some metals / plastics / wood and others substrates.

BENEFITS

- Easy to apply by spraying from a spray bottle, brushing on, or submerging in Nygone for 1 to 12 hours depending on the substrate
- Will effectively remove coatings without damaging sensitive parts
- No scrubbing or scraping required. Simply apply and the coating peels right off after 1 to 12 hours depending on the substrate type
- Better solution than paint strippers, sanding, or scrubbing & scraping
- Less remover required than paint strippers
- Biodegradable product
- Benzene-free. No harsh ingredients / safe for the end-user
- Nycote Laboratories has 60 Years of Experience in Aerospace Collaborations
- Is REACH Compliant and ingredients are not listed SVCH

WHY DO COATINGS NEED TO BE REMOVED?

Coatings are sometimes completely removed as a part of standard inspection processes. After complete removal of the coating, small corrosion defects such as filiform exfoliation can be visually detected. These defects are not always apparent without removing the coating system. Further, If the coating is protecting sensitive electronics, such as aircraft control panels, they may need to be inspected or replaced and then coated. Another consideration for removal of the old coatings may be to maintain aesthetics of worn or scuffed surfaces.

Nycote Laboratories Corporation (NLC) collaborates with aerospace OEM's worldwide and understands directly what challenges need to be solved. As such, NLC was tasked by major OEM's to find a safe and simple solution for **removing Polymer, Epoxy & Conformal coating products**. Coating engineers and technicians require a safe effective way to remove coatings from valuable parts without damage and without expensive time-consuming processes.

HOW DO YOU REMOVE POLYMER, EPOXY, AND CONFORMAL COATINGS?

Coating removal techniques can actually degrade the substrate if they are not suited for the surface or are not performed correctly. This could have potential catastrophic consequences.

Once Nygone is applied to the surface of the substrate it will penetrate the coating by its solvent component, or diffusion. Once the coating is penetrated, a secondary chemical component of Nygone attacks and breaks the hydrogen bonds of the resin to the pigments and fillers. The primary and secondary chemical components reach the uncoated substrate (usually metallic) and a reactive action takes place causing the coating to lift away from the substrate. At this point the coating can be manually pulled away from the substrate, or if submerged will likely pull away from the surface during submergence.

Before applying Nygone to your substrate, we highly recommend applying to a small test patch area to determine the effects on your surface.

Please contact sales@nycote.com for technical or sales assistance.

Nycote Laboratories Corporation
12750 Raymer Street, Suite A3
North Hollywood, CA 91605

P: +1 (818) 764-9498
E: sales@nycote.com
nycote.com

