Escoat® RA-70A Release Coat

Introduction: Escoat RA-70A Release Coat is a non-silicone product especially suited for printers of pressure sensitive labels, film, tapes including polypropylene, polyethylene, and polyester where appropriate release is needed. Escoat RA-70A Release Coat can be supplied in various solids concentrations and are ready for use without additional dilution or additives.

Material Description: Release Coat Varnish

Chemical Name: Polyvinyl Stearyl Carbamate (PVSC) Heptane Blend

Empirical Formula: (PVSC) \[CH_2-CH(OCONHC_{18}H_{37})_n\] Heptane Blend \[C_7H_{16}\]

CAS #: (PVSC) 36671-85-9 Heptane Blend 142-82-5

Molecular Weight: (PVSC) \([339]_n\) or 110,000 – 135,000 Heptane Blend 100.2

Physical Properties:

Appearance: Clear to amber in color liquid [gel at low temps]

Odor: Hydrocarbon odor

Concentration: RA-70A: 1.5% solids

Solvent: Heptane Blend

Flash Point: 25° F (-4° C) (Closed Cup)

Application Instructions:

- Temperature of Escoat RA-70A Release Coat should be at least 90°F to preclude gel formation.

- Mix well. Heat and mix until no residue is present. A milky waxy material will settle out if Escoat RA-70A Release Coat is stored at temperatures significantly below 90°F.

- Recirculate Escoat RA-70A Release Coat from a heated, large container (5 gallon). The entire system must be warm including analox roller and reservoir before applying.
- For initial trial runs, operate at very slow speeds. It’s important to completely dry ink and release coat. Rewind rolls, allow rolls to temperature stabilize for 3-4 hours. Then unwind. Check for adhesive pick-off and tack of adhesive.

**Printing:**

**Polypropylene, Polyester, & Polyethylene films:**

Tapes coated with acrylic adhesives may have release coat on non-adhesive side. Solvent rubber and hot melt adhesive coated tape will have release coat.

**Printing Sequence:**

Tapes with no release coat, printing procedure is as follows:
Corona treatment -> print -> dry -> release coat -> dry

Tapes with release coat, printing procedure is as follows:
Corona treatment or Primer -> dry -> print -> dry -> release coat -> dry

Release coat should be applied out of a heated recirculating system. Since the Heptane blend can be corrosive to the printing plates commonly used with flexographic printing, choose plates that are solvent resistant.

**Trouble Shooting:**

A. **Ink will not “stick”**
   1. Check analox roller to make sure no “caking” of ink block gravure indentations on roller. These indentations must be cleaned to pick up ink. Same for release coat analox roller.
   2. Check tape surface, is it release coated? If so, then it is almost impossible to directly apply ink. Generally rubber based adhesives are release coated. If tape is already release coated, you may need corona treating and/or a primer coating.
   3. Experiment with different inks. Consult ink supplier for inks compatible with your tape surface.

B. **Ink will not dry**
   1. Slow press speed until drying occurs.
   2. Use finer analox roller.
   3. Add more heat and air movement or increase drying time.

C. **Release coat “smears” ink**
   1. Use slower press speed. Make sure ink is dry. Add more heat and air.
   2. Use finer analox for release coating.
3. Ask ink supplier for ink less soluble in the Heptane blend. A heptane blend is the solvent for Escoat RA-70A.

D. When unwound after printing, tape exhibits adhesive pick-off
   1. Check release coat analox roller for cleanliness (blocked surfaces).
   2. Reduce press speed. Release coating may not be completely dry.
   3. Use higher solids concentration, if needed.

Storage:
This product is a flammable liquid. Store in sealed containers in approved flammable storage areas. Avoid open flame, sparks, and high heat during use. Do not breathe vapors.

Toxicity & Safety:
This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin, or implantation within the human body is specially intended, unless the finished product has been tested in accordance with the Food and Drug Administration and/or other applicable safety testing requirements. Because of wide range of such potential uses, Mayzo, Inc. is not able to recommend this material as safe and effective for such uses and assumes no liability for any such uses. Read and understand the Material Safety Data Sheet before using or handling this product.

FDA Regulations:
This product has not been tested for clearance by the FDA for use as an indirect food additive in food packaging and/or other applications. Contact your Mayzo representative if FDA clearance is needed.

The information contained herein is believed to be reliable. However, Mayzo, Inc. makes no warranty, whether expressed or implied, including warranties of merchantability or of fitness for a particular purpose, for the product or products referred to herein. No statements or recommendations contained herein are to be construed as inducements to infringe any relevant patent, now or hereafter existence. Under no circumstances shall Mayzo, Inc. be liable for incidental, consequential, or other damages from alleged negligence, breach of warranty, strict liability, or any other legal theory, arising out of the use of handling of the product or products referred to herein. The sole remedy of the buyer and sole liability of Mayzo, Inc. for any claims shall be limited to the buyers purchase price of the product which is subject of the claim or the amount actually paid for each product, whichever is less. Technical advice furnished by seller shall not constitute a warranty, which is expressly disclaimed, all such advice being given and accepted at the buyers risk.