



## RA-120W

### Water-based Release Coat

**Introduction:** RA-120W Release Coat is a water-soluble fluorochemical used to provide release characteristics in paper and paperboard products. It is ideal for use on pressure sensitive tapes and labels as well as other substrates requiring release. RA-120W Release Coat is to be applied to the reverse or non-adhesive side of the substrate. It is printable using conventional flexographic inks and will accept normal ballpoint and marker inks. It is compliant with FDA 176.170 for indirect food contact for paper and paperboard applications.

**Material Description:** Fluoro-Phosphate Ester Release Coat

**Chemical Name:** Fluoro-Phosphate Ester

**Empirical Formula:** Proprietary Blend

**CAS #:** 74499-44-8

**Molecular Weight:** Proprietary Blend

**Physical Properties:**

Appearance:	Light Yellow Emulsion
Ionic Characteristic:	Anionic
Solids Content:	13.0+/-1.5%
Solvents:	Water (83%) Isopropyl Alcohol (4%)
pH:	8.5 ± 1.5
Specific Gravity:	1.10+/-0.04@25°C
Soluble:	Easily soluble in water
Flash Point:	>60 °C (>140 °F) [Closed cup]

**Mixing Instructions:** Depending on the type of substrate and pressure sensitive adhesive, the concentration of solid matter required should be determined by laboratory trial. RA-120W Release Coat diluted to between 1% to 2.5% solids will be adequate in most pressure sensitive applications. Adding .25% to .5% RA-120W Release Coat to your current release coating will improve release and noise characteristics when used in masking tapes. Stir well before use.

**Application Methods:**

RA-120W Release Coat imparts a high level of oil resistance exceeding usual requirements when applied to bleached Kraft pulp paper which does not contain rosin-size and aluminum sulfate.

- By roll coating method on paper-board:

Isopropyl Alcohol	Water	PVA (10% Solution)	RA-120W	Oil Resistance (KIT NO)	Water Absorption Rate (g/m <sup>2</sup> /min)
10%	55%	30%	5%	6	36
10%	50%	30%	10%	8	35
10%	40%	30%	20%	10	25

(% as product, not as solid)

- By Flexographic printing press: May be applied in-line using 200 - 300 line anilox rolls. Complete drying of the applied coating must occur prior to rewind to avoid degradation of release performance.

**Applications:**

Excellent for masking tape and pressure sensitive label applications in which superior release properties are desired. Provides excellent release when used with micro-encapsulated adhesives applied to re-positional labels. RA-120W Release Coat is used for labels and packaging of vegetable oil and other greasy foods to maintain their packaged consumer appeal by eliminating objectionable stains caused by migration of greasy fluids through the board or paper substrate. RA-120W Release Coat may also be used to reduce treatment costs in tablet edge padding and silicone release coatings on label backing papers.

**Advantages:**

- Used as is, or as an additive to your current release coating, resulting in greatly improved release characteristics.
- No adverse effects on color, air permeability or strength of paper substrates.
- Compliant with FDA 176.170 for indirect food contact for paper and paperboard applications.

**Packaging:**

RA-120W Release Coat is available in a 441 lb. (200 kg) steel drum.

**Storage:**

Keep away from fire and sunlight. Protect eyes and skin from direct contact and avoid inhaling. Do not store below 5°C or over 40°C. Keep container tightly closed.

**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:**

RA-120W is compliant with FDA 176.170 for indirect food contact for paper and paperboard applications.

Modified 10/15/09: To change FDA compliance to indirect food contact.

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