

Alert Level: **INFORMATIONAL**

Instruments: RAS-100, RAS-500

Software Versions: All versions

Hardware Version: N/A

Subject: RAS Bag Materials

Summary: Several RAS sample bag materials are available and described here in detail.

Technical Details: Available RAS bag materials are Mylar[®] laminated, Tedlar[®] or Kynar[®]. Each material is suitable for sampling seawater, however, each scientist must determine bag suitability for their specific biogeochemical application. RAS bags are reusable, however, are non-sterile. Cleaning and sterilization procedures vary by user and should be identified according to scientific requirements and appropriateness for use.

Sample bags are available to purchase for compatibility testing. Contact us at www.mclanelabs.com for more information.

MYLAR Laminated

Opaque laminated bags have an inner layer of polyethylene, middle layer of aluminum foil, and outer layer of polyester (Mylar). Total thickness is 4mil. The layers are laminated with a solventless polyurethane adhesive.

Note - RAS users have reported that the Mylar laminated bags' inner polyethylene liner is not compatible with Mercuric Chloride and Lugol's Solution.

TEDLAR

Clear Tedlar bags are 2mil thick polyvinyl fluoride film.

Tedlar Datasheet :

<https://www.dupont.com/content/dam/dupont/amer/us/en/tedlar-pvf-films/public/documents/Tedlar-Properties-Overview.pdf>

KYNAR

Kynar bags are very durable, 4mil thick polyvinylidene fluoride film.

Kynar Datasheet:

<https://hpp.arkema.com/en/product-families/kynar-fluoropolymer-family/>