

HOW TO ...

Identify the fabric of your RIB, inflatable boat, dinghy, life raft or inflatable kayak collar, tube or sponson.

Hypalon or PVC?

If you need to undertake any repair to your inflatable boat collar or tubes then you first need to establish the inflatable tube fabric that your boat, RIB, dinghy, kayak or life raft is made from. The type of inflatable collar or tube fabric determines the type of adhesive, solvent and fabric repair patches that you will need to complete a successful repair

There are three main types of material used in the manufacture of inflatable boat collars or tubes:

- Hypalon
- Polyvinyl Chloride (PVC)
- Polyurethane (PU):

Hypalon: This is a synthetic rubber coating onto polyester or nylon fabric and usually with a neoprene coating on the back of the fabric. The rubber coating is very hardwearing and can last for over 20 years if cared for by keeping your boat clean and applying a UV conditioner. Hypalon joints are glued by butting the fabric together and applying glued cover strips or tapes over the seams, or the sections can be overlapped and glued. Hypalon fabric is considerably more expensive than PVC but is a similar cost to good quality PU fabric.

Hypalon is manufactured in a wide range of colours and textures.

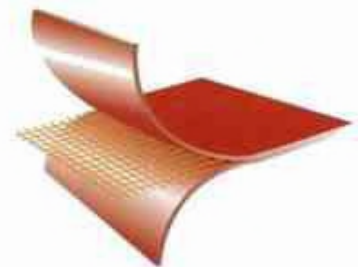
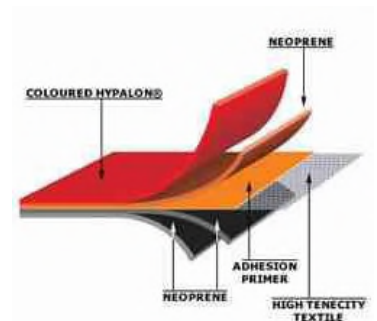
PVC: This is a plastic coating that is chemically known as polyvinyl chloride and is applied as a sandwich coating to polyester or nylon fabric. PVC is not a flexible material in its simple state and requires an **additive** to make it pliable and to be utilised as a coating to the base fabric. Older PVC fabrics gained a reputation for the plasticising additive degrading over time due to exposure to ultra-violet light (UV), which made the PVC brittle and lead to cracking. Modern advances have significantly addressed this issue and quality PVC fabric manufacturers provide 10 year+ UV guarantees on their marine grade fabrics. A PVC tube is the cheapest production material and can last for up to 15 years and is now used in most mass-production boats as the joints can be rapidly welded using thermal or high-frequency welding. They can also be glued, making repairs quick and simple.

PU (Polyurethane): PU is the relatively 'new kid' on the fabric block. There is independent test evidence to support quality PU manufacturers' claims that PU has superior airtightness than Hypalon fabrics, and also has high levels of wet and dry abrasion resistance combined with high-tensile strength. The fabric price is comparable to good quality Hypalon fabric but considerably more expensive than PVC fabrics. Good quality PU is designed to last for up to 15 years, but there are earlier examples that are still in use after 20 years+. PU fabric is currently manufactured in a limited range of colours, compared to the wide range of colours available with Hypalon and PVC fabrics.

How do I check what type of fabric my inflatable dinghy, RIB, inflatable kayak or life raft is made from?

There are a number of methods to identify what boat fabric you have:

1. Check-out the list of RIB and inflatable boat manufacturers below.
2. Look at the back of the tube fabric (i.e. the inside of the tube through the inflation valve or a tear in the inflation collar or tube, if possible (see here for tips and advice on how to repair inflatable boat <https://www.ribstore.co.uk/advice/advice-and-information>). Hypalon material is a dull dark grey or black colour on the back face of the fabric, whereas PVC and polyurethane (PU) is the same glossy colour on both sides of the fabric.



3. Abrade/sand the inflatable boat fabric in a conspicuous area; Hypalon fabric will turn dull and produce a dust or residue, whereas PVC will scratch but maintain the same glossy colour.
4. Apply a small amount of MEK solvent to a conspicuous area of the tube fabric (This test only works if you use the correct solvent, i.e. MEK, which is known chemically as Methyl Ethyl Ketone also known as Butanone – this is available from <https://www.ribstore.co.uk/ribstore-mek-primer-cleaner-solvent-for-pvc-inflatable-boat-fabric-adhesive-250ml-or-500ml> , or you can use Acetone). If the fabric is PVC then the material will feel tacky and the solvent may leave some of the fabric colouring on the application cloth. Hypalon will leave an oxidized (dull) appearance and sometimes some colouring on the application cloth but Hypalon material will not feel tacky. These solvents are dangerous and should be used/applied with appropriate care in a well-ventilated area with no naked flames.

The list below of manufacturers and material types isn't exhaustive and RIBstore cannot guarantee its accuracy. Whilst every effort is made to verify the facts manufacturer's change specifications and options sometimes between countries. This list is periodically updated, and we would be grateful to hear of any errors or omissions. If you are unsure what material your boat is made of then please contact RIBstore.

Manufacturers who use HYPALON in the manufacture of their inflatable boats and RIBs

AB (Artigiana Battelli)	DELTA	NOVA JOLLY	SELVA
ACHILLES	DOMINO	NOVAMARINE	SEMPERIT
AQUAFLYTE	DSB	NOVURANIA	SELVA
AVON	DUNLOP	OSPREY	SKUA
BALLISTIC	EUROCRAFT	QUICKSILVER (also available in PVC)	STINGHER
BEAUFORT	EXCEL (Hypalon available to special order)	PICTON	SULIS MINERVA
BRIG (early models)	FLATACRAFT	REDBAY	SUNSPORT
BWM	GOMMONAUTICA	REVENGER	TIDEL (re-tube/collar manufacturer)
CALAGARI	GORDON	RIBCRAFT	TINKER
CAMPARI	GUMOTEX	RIBEYE ('S' Series/larger RIBs only – check first!)	TYPHOON (PVC as well)
CARIBE	HENSHAW (re-tube/collar manufacturer)	RIBTEC	WETLINE RIBS (Hypalon as an option on the larger RIBs)
CARSON (a few early ones were PVC)	HUMBER	RIBQUEST	WILLIAMS JET TENDERS
CATAPULT CATAMARANS (tubes were made by Henshaw)	LOMAC	RIB-X	XS-RIBS (also manufacture in PU – check first!)
CHINOOK	MERCURY (also available in PVC)	RING	YAM RIBS (not YAM inflatables)
COBRA	METZLER (early models)	ROBCRAFT	ZODIAC (pre-1986 models and a customer option on some RIBs)
COMPASS INFLATABLES (not be confused with Compass II/24)	ML LIFEGUARD	SCANNER	
	NORTHCRAFT (also in PU)	SCORPION	

Manufacturers who use PVC in the manufacture of their inflatable boats and RIBs

AQUAPRO	HONDA	PLASTIMO	TYPHOON (Hypalon as well)
ARIMAR	HONWAVE	PROWAVE	VALIANT (some commercial/larger RIBs are PU)
BOMBARD	JAGO	QUICKSILVER (also available in Hypalon)	WAVELINE
BRIG (some early models were Hypalon)	LODESTAR	RIBEYE (except the 'S' Series/larger RIBs)	WAVECO
B-SQUARE	MAXXON	SEAGO	WETLINE (larger RIBs are Hypalon)
CARSON (only a few early ones most are Hypalon)	MERCURY (also available in Hypalon)	SEAPRO	YAM (inflatables, RIBs are Hypalon)
COMPASS II/24	METZLER (more recent models)	SERIE	ZED
EUROVINYL	NARWHAL (also offer a PU option)	SEVYLOR	ZOOM
EXCEL (available to special order in Hypalon)	NEUVISA (also offer a PU option)	SUNSPORT	ZODIAC (Hypalon is a customer option on some RIBs)
GEMINI (dinghies only)	OMC EXPRESS	SUZUMAR	
		TOHATSU	

Manufacturers who use POLYURETHANE (PU) in the manufacture of their inflatable boats and RIBs

NARWHAL (mostly PVC but also offer a PU option)	NORTHCRAFT (also in Hypalon)	VALIANT (some smaller/leisure RIBs are PVC)	WING
NEUVISA (mostly PVC but also offer a PU option)	TORNADO (some early ones' manufactured in Hypalon)	VANGUARD (also manufacture in PVC and Hypalon)	XS-RIBS (also manufacture in Hypalon)