



MECAL TECHNICAL NOTE

MTN 13-2

Issued by the *MECAL* Technical Committee

LIFEJACKETS - TYPES

Reference: All Vessels

Inflatable Lifejackets:

Lifejackets which rely totally on oral inflation are not acceptable to the code

The choice between auto & manually activated inflatable lifejackets must be made with care. The choice should take into account the likely ability of a passenger to be able to manually activate the inflation. For carrying passengers under general charter it is recommended that auto inflation types are specified..

Lifejackets for children and oversize persons should always be available as necessary. *MECAL* SCV2 Compliance Documents include a clause drawing attention to this.

Remember that where lifejackets are inflatable type there must be spare lifejackets to 10% of persons aboard or 2 whichever is the greater.

Inflatable lifejackets must be serviced annually & such service must be carried out by an authorised service station at not less than 3 year intervals. Visual checks & manual inflation "hold-pressure" tests should be carried out more frequently, according to usage.

It is recommended that inflatable lifejackets with crotch straps are specified for sailing vessels.

All Lifejackets:

There is a lot of "loose terminology" regarding lifejackets. It is important to distinguish between buoyancy aids and full lifejackets; the latter will right an unconscious person face down in the water whereas the former will not. Also the various buoyancies (50N, 100N, 150N, 275N etc) refer to the nominal buoyancy for an adult. Each specification will include a variety of buoyancies to suit big and small persons.

EN393 specifies buoyancy aids of nominal buoyancy 50N in the adult size and are not to be used on coded boats.

EN395 specifies buoyancy aids of nominal buoyancy 100N in the adult size. Despite being described as lifejackets in some literature, these items are buoyancy aids; they are not capable of reliably turning over an unconscious person in the water as they do not have the big collar that EN396 jackets have. Not to be used on coded boats.

EN396 specifies lifejackets suitable for offshore use and have the capability of righting an unconscious person face down in the water. This is achieved by buoyancy in the collar. These are real "lifejackets". The standard buoyancy for an adult is 150N but EN396 lifejackets are made in a variety of buoyancies ranging from about 75N to 175N depending on the size and weight of the wearer. Childs sizes are available too. These all tend to be described loosely as "150N" units. EN396 lifejackets can be used on coded boats.

EN399 specifies full lifejackets of nominal buoyancy 275N for arduous conditions and where the person may be wearing very heavy clothing etc. EN399 lifejackets can be used on coded boats.

Even the manufacturers get it wrong. For example one manufacturer describes children's EN396 lifejackets as 150N units whereas of course they have much less buoyancy suited to the smaller child.

So to recap; only EN396 or EN399 full lifejackets should be used on coded vessels, even for children. The exact buoyancy and size of the jacket should suit the size of person. Most of the manufacturers produce EN396 lifejackets in children's sizes, where of course the actual buoyancy will be less than 150N. The important detail is the spec (EN396 or 399) and not necessarily the buoyancy.

Finally it is essential that lifejackets are properly adjusted for the wearer, and it is strongly recommended that lifejackets have crutch strap and face masks. Lifejackets in sailing vessel should have integral harnesses, and safety lines with safety hooks.