

# Buoyancy afloat

**Personal floatation devices come in two main forms – buoyancy aids and lifejackets.**

A buoyancy aid is designed to keep someone afloat. It allows the wearer full movement whilst an active sporting activity is carried out. However if unconscious, the wearers head could be face down in the water.

A lifejacket has a buoyancy distribution sufficient to turn the user to a position where their mouth is clear of the water, even when they're unconscious.

## What should I wear?



- A buoyancy aid in a sailing dinghy, personal watercraft, windsurfer, canoe or water-skiing or if providing safety cover for such an activity.
- A life-jacket in an open boat such as small power boat or when going ashore in a yacht tender.
- A life-jacket at all times on a yacht or motor cruiser if you are a non-swimmer and when there is any possibility of entering the water. Also when the skipper deems it necessary or whenever you want to wear one.

Where it was once rare to see people wearing lifejackets afloat, it is now an accepted norm. Always wear a life-jacket when abandoning ship. Specialist lifejackets are available for infants and children.

## Levels of Buoyancy

Buoyancy aids and life jackets have different levels of buoyancy. These levels of buoyancy should be considered and influence your choice. There are four main buoyancy levels; 50, 100, 150 and 275. In general terms, Level 50 is a buoyancy aid designed for when help is close at hand, whereas Level 150 is a general purpose lifejacket used for offshore cruising and motor boating.

To determine these levels of buoyancy under test conditions, the test subjects (real people) are dressed in bathing costumes. This requirement provides good consistency and repeatability for testing, but needs to be taken into account in your selection, as foul weather clothing or babies nappies are likely to adversely effect the performance level. This is particularly true with Level 100 and 150, when turning a person over so their head is clear of the water. A garment that is the incorrect size for the wearer will adversely affect the performance level.

Example	Level 50	Label
	<p>This level is intended for use by those who are competent swimmers and who are near to bank, shore, or who have help and a means of rescue close at hand. These garments have minimal bulk, but they are of limited use in disturbed water, and cannot be expected to keep the user safe for a long period of time. They do not have sufficient buoyancy to protect people who are unable to help themselves. They require active participation by the user. Standards applicable to this level; EN 393 or ISO 12402 – 5.</p>	

### Example

#### Level 100

This level is intended for those who may have to wait for rescue, but are likely to do so in sheltered water. The device should not be used in rough conditions. Standards applicable to this level; EN 395 or ISO 12402 – 4.



### Label



#### Level 150

This level is intended for general offshore and rough weather use where a high standard of performance is required. It will turn an unconscious person into a safe position and requires no subsequent action by the user to maintain this position. Standards applicable to this level; EN 396 or ISO 12402 – 3.



#### Level 275

This level is intended primarily for offshore use and by people who are carrying significant weights and thus require additional buoyancy. It is also of value to those who are wearing clothing which traps air and which may adversely affect the self-righting capacity of the lifejacket. It is designed to ensure that the user is floating in the correct position with their mouth and nose clear of the surface. Standards applicable to this level; EN 399 or ISO 12402 – 2.



### Optional extras or necessities



There are a host of optional extras that can be fitted to a lifejacket such as;

- crotch straps to stop the lifejacket riding up over your head
- spray-hood to stop waves and spray entering your mouth
- lights, dye-markers and personal locator beacons to aid location
- harness D ring – for harness attachment to stop you falling off in the first place

Some of these *optional extras* such as crotch straps, spray-hoods and lights are really essential to actually keep you alive in the water and aid your location.

### Inflatable lifejackets and buoyancy aids require regular checks and servicing.

Members of the National Water Safety Forum – Sea Advisory Group, developed the information in this document. Enquires or comments regarding this information in the first instance should be directed to: [info@nationalwatersafety.org.uk](mailto:info@nationalwatersafety.org.uk) Lifejacket and buoyancy aid images reproduced with the kind permission of Baltic Safety Products.