

High-Visibility Vests Fail the Test

Study examines more than 100 vests all over Spain

A survey conducted on behalf of the Royal Spanish Automobile Club reveals that 63% of all vests sold in the market have safety problems.

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The Royal Spanish Automobile Club (RACE) teamed up with Spanish Department of Transportation and the National Consumer Institute to carry out a study in the course of which more than 100 reflective vests gathered from all over Spain were examined. The results of this examination show that 63% of the vests have safety problems, either with regard to the design of the garments or to their daytime visibility (coefficient of luminance) or night-time visibility (coefficient of retroreflection). Taking into account insufficient marking and information leaflets, this percentage of non-compliant garments increases to a total of 87%.

A number of renowned organisations participated in this study, which was conducted over a period of more than five months. Among them were AITEX, an accredited institution for CE certification in the area of personal protective equipment (protection and safety) and Lumaquin, a company specialised in the manufacturing and distribution of measuring devices for laboratory quality control.

The collection/procurement of the vests constituted one of the major parts of the work. In a first step, a survey was carried out among more than 540 drivers asking them, among other questions, where they bought their reflective vests and whether they were aware of the regulations. The results show that 98% of the drivers know that they are obligated to carry a reflective vest in their car. 59% of those interviewed know what a reflective vest has to be like. Most of those persons who had already obtained a vest, bought it in a specialist store for automotive spare parts or in a super-market.

A team was then commissioned to buy the vests on the basis of the same buying criteria, keep the receipts and

to note down the place, the date and the price of purchase, as well as all other relevant information. The study covered all purchasing channels, including buying vests via the Internet. The vests were then numbered and submitted to analysis institutions for evaluation, which yielded the following results:

Total results of the study:

Results of the Retroreflection Test (Night-Time Visibility)

This test consists of measuring the retroreflection of eight different points on each garment in accordance with the EN 471 safety standard.

34% non-compliant
66% compliant

Chromatic Coordination:

Luminance Factors (Daytime Visibility)

In this analysis, the material of the garment is analysed with special focus on daytime visibility. It is important to note that the majority of the collected garments were of yellow, and, to a minor quantity, of orange colour

52% non-compliant
48% compliant

Design

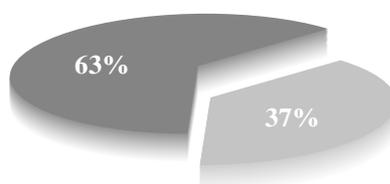
This is the point that is easiest to recognise by the users, but it is important to point out that many garments may incorporate elements that might alter the design as demanded by the standard.

27% non-compliant
73% compliant

General Conclusion of the Safety and Visibility Analysis

This chart shows that 65% of the vests analysed present safety problems of some type.

63% non-compliant
37% compliant



Analysis of Information Systems

Marking Analysis

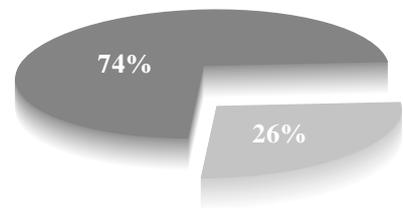
59% non-compliant
4% compliant

Information Leaflet

69% non-compliant
31% compliant

General Conclusion of Marking and Leaflet Analysis

74% non-compliant
26% compliant



“Think of your safety before you buy”

The Spanish Automobile Club RACE has launched an information leaflet designed to increase awareness and inform about the use of reflective vests. It contains information, such as where to buy them, and others useful advice on how to use them. It was produced with the assistance of the Spanish National Consumer Institute and the Department of Transportation and will also be distributed via the RACE homepage.

The motto chosen for this action, namely “Think of your safety before you buy”, has a key subject: safety. The question is not about buying a vest to comply with a standard or because non-compliance leads to sanctions, but to fulfil the safety concept both in buying and using the vest.