

EUROPEAN STANDARDS EN 166

Safety Standards Guide

To assist you in your understanding of markings on Eye Protection products covered by this standard you should note:

Optical Standard:

Class 1:	For continuous work	-	1
Class 2:	For intermittent work	-	2
Class 3:	For occasional work, but must not be worn continuously	-	3

Frame Lens

Areas of Use:

Liquids (chemical)	3	-
Large Dust Particles	4	-
Gas and Fine Dust Particles	5	-
Short Circuit Electric Arc	8	-
Molten Metals and Hot Solids	9	9

Frame Lens

Mechanical Properties:

Increased Robustness (General Purpose)	-	S
High Energy Impact (190m/sec)	A	A
Medium Energy Impact (120m/sec) Grade 1	B	B
Low Energy Impact (45m/sec) Grade 2	F	F
Increased Robustness – General Purpose Impact-Performance at Extremes of Temperature	T	T

Frame Lens

Optional:

Resistance to Mechanical Damage (Anti-Scratch)	-	K
Resistance to Misting/Fogging	-	N

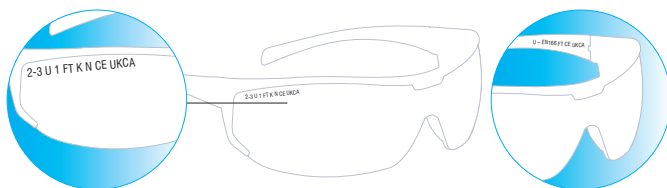
Frame Lens

NB: The "A", "B", "F" and "S" markings on frame and lens represent tests carried out on each component and therefore may be different – in which case the lower level must be assigned to the complete unit when making an assessment.

Buying Guide

Anti-mist, Anti-scratch? Does your eyewear reach the standard?

"K" and "N" are coating treatments that reach the standard set by EN166. Look for the "K" (anti-scratch) and "N" (anti-mist) on the lens of your safety glasses, goggles and face shields. By EN law all safety eyewear should have these marks, so any lenses lacking the "K" or "N" symbols do not reach the required standard.



K = Anti-scratch treatment applied to the surface of the lens whose hardness is a barrier against superficial damages that can impair vision. The coating is permanent and it offers performance to the standards required by EN166

N = Anti-mist treatment, which, due to its chemical and physical abilities, prevents the formation of condensation by absorbing the humidity drops. The coating is permanent and it offers performance to the standards required by EN166

Safety Symbols Guide

We have developed a range of safety icons to help you compare and find the right eye protection.



Anti Scratch K



Anti Scratch



Anti Mist N



Anti Mist

EN 169 – Welding Filters

EN 170 – Ultra-Violet Filters

EN 171 – Infra-red Filters

EN 172 – Solar Protection Filters for Industrial Use

EN 175 – Welding Work Equipment

EN 207 – Laser Protection Eyewear

EN 208 – Laser Adjustment Eyewear

UKCA Mark Information

UKCA Update

On the 20th of June 2022, the Government amended their guidance on the requirements to be used for UKCA marking across many product sectors including of course PPE. The full guidance can be found by following this link. <https://www.gov.uk/guidance/placing-manufactured-goods-on-the-market-in-great-britain>

The changes are described as "easements" to the previously published guidance in order, in their words, "to further support businesses as they adapt to the UKCA regime". Of the 4 specific easements cited, by far the most important is that where any PPE which has been CE conformity assessed and certified by non-UK conformity assessment bodies (ie Notified bodies) a manufacturer can now use that CE certification as the basis for declaring that product to be compliant with the UKCA regime. In the case of PPE, the CE certificate must be a valid Module Britain certificate. This means that a manufacturer can apply the UKCA mark without the need to involve Approved Bodies scoped for PPE. This "easement" will be recognised until the 31st of December 2027 or until the expiry of the Module B, CE certificate (whichever is sooner). See page 10 of the Guidance. The period by which it is acceptable to affix the UKCA mark by a label or on accompanying documentation has been extended until the 31st of December 2025. In the Government's communication on this matter, they also highlight that the existing stock already placed on the market under the regulation that applied at the time it was so placed, can continue to be sold-on. This is not a change to previous guidance just the Government underlining that there is no need to re-test or re-work product so placed on the GB market.

**UK
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