

## Type of protection

### 1. GOGGLES -

Can provide protection for all types of hazards.  
May be worn over spectacles

### 2. SPECTACLES -

Comfortable and available in a variety of styles.  
Will not keep out dust, gas or molten metal.

## Choosing safety eyewear

To help choose safety eyewear best suited to your needs the following information may be useful. Whilst every effort should be made to remove hazards as the result of a Workplace Risk Assessment, if Safety Eyewear is necessary as a last resort, the following selection criteria should be considered:

- Type of Hazard
- Type of Protection
- Type of Lens

## Type of protection

Both employee and employer have a responsibility to keep all eye protection in good order. User instructions are provided and give cleaning and maintenance information. We provide a full range of products to help keep eyewear in optimum condition.

## Type of lens

### 1. Clear -

Suitable for general use.

### 2. Anti-Glare -

Suitable for use in high glare situations such as finished concrete slabs in bright sun light.

### 3. Yellow -

Suitable for those moving from light to dark environments.

## Type of lens

Hazards fall into 4 main categories:

### 1. Mechanical –

Flying Debris, Dust or Molten Metal.

### 2. Chemical –

Fumes, Gases or Liquid Splash.

### 3. Radiation –

Heat (Infrared), Ultraviolet light or Glare.

### 4. Laser Light –

Over a wide spectrum of wavelengths from Ultraviolet to Infrared.

## Identifying eyewear markings

To assist you in your understanding of markings on eye protection products covered by this standard, this chart should be of help. You should note:

### OPTICAL STANDARD:

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

### AREAS OF USE:

	FRAME	LENS
Liquids (chemical)	3	3
Large dust particles	4	4
Gas and fine dust particles	5	5
Short circuit electrical arc	8	8
Molten metals and hot solids	9	9

### MECHANICAL PROPERTIES:

	FRAME	LENS
High energy impact (190m/sec)	A	A
Medium impact energy (120m/sec) Grade 1	B	B
Low energy impact (45m/sec) Grade 2	F	F
Increased robustness - General purpose impact - Performance at extreme temperature	T	T

### OPTIONAL:

	FRAME	LENS
Resistance to misting/fogging	-	N
Resistance to mechanical damage (Anti-Scratch)	-	K

\*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.

# Lens and Frame Markings

EXAMPLE OF LENS MARKING				EXAMPLE OF FRAME MARKING			
MARK OF THE MANUFACTURER	OPTICAL CLARITY	IMPACT STRENGTH	CE MARK OF CONFORMITY	MARK OF THE MANUFACTURER	EN SAFETY STANDARD	IMPACT STRENGTH	CE MARK OF CONFORMITY
B	1	F	CE	B	EN166	F	CE

## Understanding lens markings

B	1	F	9	K	N	CE
MANUFACTURER'S IDENTIFICATION CODE	OPTICAL CLASS 1 - BEST CLASS 2 - MEDIUM CLASS 3 - LOW QUALITY*  * NOT FOR CONTINUOUS USE	SYMBOL OF MECHANICAL STRENGTH (OPTIONAL)	SYMBOL OF NON-ADHERENCE OF MOLTEN METAL  (refer to page 184 for list of areas of use)	SYMBOL OF RESISTANCE TO SURFACE DAMAGE BY FINE PARTICLES (OPTIONAL)	SYMBOL OF RESISTANCE TO FOGGING (OPTIONAL)	SYMBOL OF CONFORMITY TO CE DIRECTIVE 89/686 EEC

F - LOW ENERGY IMPACT (45 m/s)

B - MEDIUM ENERGY IMPACT (120 m/s)

A - HIGH ENERGY IMPACT (190 m/s)

T - IMPACTS AT EXTREME TEMPS

## Understanding frame markings

B	166	34	B	CE	0196
MANUFACTURER'S IDENTIFICATION CODE	NUMBER OF EN STANDARD	FIELD(S) OF USE (OPTIONAL)	SYMBOL OF RESISTANCE TO HIGH SPEED PARTICLES (OPTIONAL)	SYMBOL OF CONFORMITY TO CE DIRECTIVE 89/686 EEC	CERTIFICATION MARK, NUMBER OF CERTIFIED BODY

NO SYMBOL - BASIC USE

3 - LIQUIDS

4 - LARGE DUST PARTICLES

NON - INCREASED ROBUSTNESS

F - LOW ENERGY IMPACT (45 m/s)

5 - GAS & FINE DUST PARTICLES

8 - SHORT CIRCUIT ELECTRIC ARC

9 - MOLTEN METALS & HOT SOLIDS

B - MEDIUM ENERGY IMPACT (120 m/s)

A - HIGH ENERGY IMPACT (190 m/s)