



EYE & FACE Protection

 **SPERIAN**
Protection you can trust

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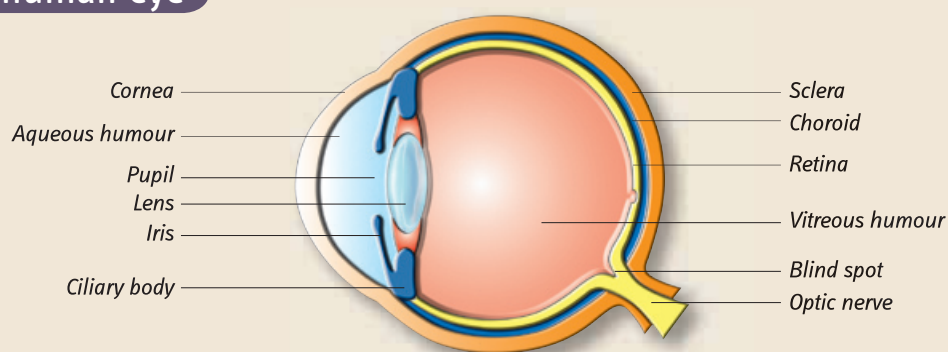
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The human eye



Industrial Injuries for the eyes

- **Injuries due to foreign bodies / penetrating injuries**

Impact, dust, solid particles, metal particles, sand

Consequences :

Corneal lesion or perforation ; tearing of the iris ; lens opacity

- **Chemical injuries**

Liquid contaminants, solvents, aerosols, acids and alkalis, lime, cement and mortar, etc.

Consequences :

Corneal burns or impaired vision ; viral infection ; conjunctivitis ; corneal ulceration

- **Radiation injuries**

Infrared, ultraviolet, laser, visible light (blue wavelengths)

Consequences :

Cataracts ; keratoconjunctivitis ; retinal lesion or burn ; crystalline lens opacity

- **Electrical injuries**

Direct contact, short circuit electric arc

Consequences :

Retinal burn; damage to the cornea or retina ; crystalline lens lesion ; possible delayed effects

- **Thermal injuries**

Hot liquids, molten material, flame

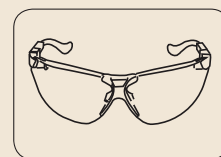
Consequences :

Eye destruction ; dulled cornea

What type of protection to choose?

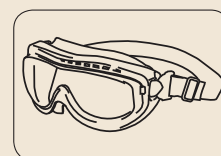
- **Sperian® safety spectacles :**
for eye protection against

- Low energy impacts (45 m/s).
- Harmful rays (ultraviolet / infrared)



- **Sperian® goggles :**
for eye protection against

- Medium energy impacts (120 m/s)
- Dust, fine particles or harmful chemicals (liquids, sprays, gases)
- Molten metals and hot solids.
- Harmful rays (ultraviolet / infrared)



- **Sperian® face shields :**
for eye and face protection against

- Medium (120 m/s) or high energy impacts (190 m/s) by bursts or solid bodies ; or splashes (liquids, molten metals) likely to cause facial wounds
- Short circuit electric arc
- Harmful rays (ultraviolet / infrared)





! WARNING ! Sperian safety eyewear products should be used only in conjunction with the manufacturer's instructions. Failure to follow such instructions could result in serious injury, including diminished vision or loss of vision, or fatality. Sperian hard hat products should only be used in conjunction with the manufacturer's instructions. Failure to follow such instructions could result in serious injury or death.

INDUSTRIAL STRENGTH STYLE

Sperian is now our new corporate identity, from now on all Pulsafe® references will be running under the Sperian® brand.



Hard Working Price

From construction and laboratory, to automotive, industrial and manufacturing, and even office applications, you'll find a full selection of products to suit your budget and employee preference.











And all Sperian products meet or exceed EN:166, EN:170 & EN:172 safety standards, ANSI Z87+ (High Impact) safety standards, and many are certified CSA Z94.3. Take another look at the company that has been providing safety solutions and leading products for over 130 years.

Sperian Millennia™

Classic and simple in appearance but highly sophisticated in design

- Balance and lightness of frame, resulting in a virtually weightless feel
- Straight temples, no adjustments or clumsy spatula temples necessary
- Comfortable, universal nose bridge
- Unique 9 base curved lens design for excellent optical qualities and complete protection
- A full, unobstructed field of vision, including side view
- Weight: 32g



Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	1000001	Black	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Indoor use	1000006	Blue	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Indoor use	1000009	Silver	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Indoor use	1002781	Black	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1F
Outdoor use (low sunlight)	1002782	Black	 TSR Grey	Abrasion Resistant / Anti-fog	5-2.5 B-D 1F
Indoor use	1002783	Blue	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1F
Indoor use	1002786	Silver	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Outdoor use	1006405	Black	 IR3	Abrasion Resistant / Anti-fog	3.0 B-D 1F
Outdoor use	1006406	Black	 IR5	Abrasion Resistant / Anti-fog	5 B-D 1F
Indoor use	1002787	Repl	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1F



VisiOTG-A

Over-The-Glasses Spectacle

Wraparound spectacle providing a wide field of view and easy fit over prescription eyewear:

- Asian Face design
- Available in 2 versions: uncoated and Hardcoat with Fog-Ban™ anti-fog coating lens
- Superb optics allow clear, distortion-free vision
- Single polycarbonate lens with integral sideshields and contoured nose bridge
- Perforated temples for addition of safety cord
- Fits comfortably over prescription spectacles
- Light, balanced frame that feels virtually weightless





Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	100001	Clear	 Clear	-	B-D+
Indoor use	100002	Clear	 Clear	Abrasion Resistant / Anti-fog	B-D+

SC1-A

Classic good looks at an affordable price

- Asian Face design
- Durable lens with special scratch-resistant Hardcoat & Fog-Ban™ anti-fog coating
- Durable black nylon frame
- Adjustable positive-lock temples provide individual fit
- Perforated temples for addition of safety cord



Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	100010	Black	 Clear	Abrasion Resistant / Anti-fog	B-D+
Outdoor use (low sunlight)	100011	Black	 TSR Grey	Abrasion Resistant / Anti-fog	B-D+S

VL1-A



Sporty, functional, affordable

- Asian Face design
- Lightweight full view lens
- Durable lens with special scratch-resistant Hardcoat & Fog-Ban™ anti-fog coating
- Soft temple tips




Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	100020	Clear	 Clear	Abrasion Resistant / Anti-fog	B-D+
Outdoor use (low sunlight)	100021	Gray	 TSR Grey	Abrasion Resistant / Anti-fog	B-D+S
Indoor use	100022	Gray	 Silver	Abrasion Resistant	B-D+S

Millennia Sport®



The best just got sportier!





- All the performance and comfort features of the Sperian Millennia with a sleek frame giving it a true sport design
- Adjustable retainer: Flexicord™
- Transparent “moulded-in-lens” brow for improved vision and comfort
- 3D ergonomically curved high impact nylon temples to accommodate hard hat harnesses more comfortably
- Available with black or teal sidearms and clear and grey lens tint choices
- Weight: 33g

Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	1005985	Black	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1 FTN
Outdoor use (low sunlight)	1005986	Black	 TSR Grey	Abrasion Resistant / Anti-fog	5-2.5 B-D 1 FTN
Indoor use	1006031	Teal	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1 FTN

Protégé™






- The floating lens design offers increased flexibility in fit and the secure wrap-around brow expands to fit a wide range of users. Protégé is thus suitable for all different face sizes for an adjustment that does not exert any excess pressure on the temples or modify the lens geometry
- Ultra lightweight design: 27 gr
- Soft, clear elastomer nose pads prevent slipping
- Soft temple tip pads provide a soft contact behind the ear, generally the most sensitive area for spectacle wearers

Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Outdoor use (low sunlight)	1015363	Black	 TSR Grey	Abrasion Resistant	5-2.5 B-D 1F
Indoor use	1015364	Black	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1F
Indoor use	1015366	Black	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Indoor use & Outdoor use	1015689	Black	 I/O Silver	Abrasion Resistant	5-1.7 B-D 1F

A700







- 8-base lenses
- Lightweight design with sport temples and soft temple tip pads
- Moulded universal nose bridge

Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	1015361	Clear	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Outdoor use (low sunlight)	1015362	Grey	 TSR Grey	Abrasion Resistant	5-2.5 B-D 1F
Indoor use	1015360	Clear	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1F

A800

- 9-base lenses provide a 180 field of distortion-free vision
- Temples feature aggressive sports styling
- Lightweight: 22 gr








Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	1015370	Clear	 Clear	Abrasion Resistant	2C-1.2 B-D 1F
Indoor use	1015369	Clear	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1F
Outdoor use (low sunlight)	1015368	Grey	 Grey	Abrasion Resistant	5-2.5 B-D 1F
Indoor use	1015350	Grey	 I/O Silver	Abrasion Resistant	5-1.7 B-D 1F

New A900

- Sporty, 8-base wrap-around poly carbonate lens
- Non-slip rubber nosepiece
- Temples with padded inserts provide a comfortable fit
- Available in Clear Hardcoat, Clear Fog-Ban™, TSR™ Gray Hardcoat, TSR Gray Fog-Ban, and Silver Mirror Hardcoat lens options
- Optional Fog-Ban minimizes lens fogging in extreme conditions
- Complies with ANSI Z87+ high impact standard



Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	A900	Black	 Clear	Abrasion Resistant	B-D+
Indoor use	A901	Black	 Clear	Abrasion Resistant/Anti-Fog	B-D+
Outdoor use (low sunlight)	A902	Black	 TSR Grey	Abrasion Resistant	B-D+S
Outdoor use (low sunlight)	A903	Black	 TSR Grey	Abrasion Resistant/Anti-Fog	B-D+S
Indoor use	A904	Black	 Silver Mirror	Abrasion Resistant	B-D+S

New FitLogic®

- Soft materials offer extended comfort for all day wear
- Floating lens design provides excellent ventilation to minimize fogging
- Extended wrap-around lens provides extra cheek and side coverage
- Optically perfect polycarbonate lens blocks 99.9% of UV rays
- Easy and quick lens replacement system
- Lenses are available with anti-fog coating
- EN166 - EN170 - EN172
- 100% dielectric
- Lifetime frame guarantee








Application	Product Code	Frame colour	Lens	Lens coating	Lens marking	Replacement Lens
Indoor use	1013337	Black	 Clear	Abrasion Resistant	2C-1.2 B-D 1FT	10 140 13
Indoor use	1013338	Black	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 B-D 1FT	10 140 14
Outdoor use (low sunlight)	1013339	Black	 TSR Grey	Abrasion Resistant	5-2.5 B-D 1FT	10 140 12
Outdoor use (low sunlight)	1013340	Black	 TSR Grey	Abrasion Resistant / Anti-fog	5-2.5 B-D 1FT	10 140 11
Outdoor use (lowlight conditions)	1013341	Black	 HDL Yellow	Abrasion Resistant	2-1.2 B-D 1FT	10 140 08
Indoor use	1013342	Black	 I/O Silver	Abrasion Resistant	5-1.7 B-D 1FT	10 140 09
Indoor use	1013343	Black	 Silver Mirror	Abrasion Resistant	5-3.1 B-D 1FT	10 140 10

Metalite® New








- Lightweight design
- Spring hinge temples - A superior feature found in RX frames or sunglass spectacles
- Bendable temples to fit your ears
- Soft nose bridge to prevent slippage and to fit your nose
- Wrap-around 8-base polycarbonate lenses for excellent coverage and protection
- Meets EN 166 standard requirements

Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	10 142 90	Black	 Clear	Abrasion Resistant	2C-1.2 B-D 1 F
Indoor use	10 142 92	Black	 Clear	Abrasion Resistant/Anti-Fog	2C-1.2 B-D 1 F
Outdoor use (low sunlight)	10 142 93	Black	 TSR Grey	Abrasion Resistant	5-2.5 B-D 1F
Outdoor use (low sunlight)	10 142 94	Black	 TSR Grey	Abrasion Resistant/Anti-Fog	5-2.5 B-D 1 F
Outdoor use (low sunlight)	10 142 95	Black	 Gold Mirror	Abrasion Resistant	5-3.1 B-D 1F

Fuse® New








- Soft adjustable saddle nose bridge
- Frame with Nickel-free top-coat
- 9-base Polycarbonate lenses
- Complies with "ANSI Z87+" high impact standards.
- Complies with CSA Z94.3 standard
- Available with Clear Hardcoat, Clear Fog-Ban™, Gray Hardcoat, Gray Fog-Ban, and Silver Mirror lenses

Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	11150800	Gunmetal	 Frame Clear	Abrasion Resistant	B-D+
Outdoor use (low sunlight)	11150801	Gunmetal	 TSR Grey	Abrasion Resistant	B-D+S
Outdoor use (bright sunlight)	11150804	Gunmetal	 Silver Mirror	Abrasion Resistant	B-D+S
Indoor use	11150805	Gunmetal	 Frame Clear	Abrasion Resistant/Anti-Fog	B-D+
Outdoor use (low sunlight)	11150806	Gunmetal	 Frame TSR Grey	Abrasion Resistant/Anti-Fog	B-D+S

Op-Tema®






- Lightweight full view lens
- Built-in moulded browbar
- Soft, adjustable nosepiece
- Adjustable temple length and lens angle
- Abrasion resistant polycarbonate lens
- Adjustable, breakaway Flexicord™ retainer for added security and convenience in your active work environment

Application	Product Code	Frame colour	Lens	Lens coating	Lens marking
Indoor use	1000016	Black	 Clear	Abrasion Resistant	2C-1.2 D 1F
Indoor use	1004947	Black	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 D 1F
Outdoor use (low sunlight)	1004948	Black	 TSR Grey	Abrasion Resistant / Anti-fog	5-2.5 D 1F
Indoor use	1004949	Blue	 Clear	Abrasion Resistant / Anti-fog	2C-1.2 D 1 F
Outdoor use (low sunlight)	1004960	Blue	 TSR Grey	Abrasion Resistant / Anti-fog	5-2.5 D 1F

Maxx Pro™

- Low profile "toric" lens fits under welding helmets, on hard hats and with most respirators, while also providing superior optics and enhanced peripheral vision
- MMT-Multi-Material Technology™ in body construction seals and conforms to most facial contours, providing:
 - Superior splash and impact protection
 - Unsurpassed comfort against the skin
- Unique lens replacement system is very easy to use and cost effective
- Indirect ventilation system channels and directs air flow over the lens to minimise fogging
- Quick adjust headband system provides fast and easy headband adjustment for a close and secure fit



Application	Product Code	Headband	Lens	Lens coating	Frame marking	Lens marking	Replacement lens
Indoor use	10 110 70	Replacement	 Clear	Abrasion Resistant / Anti-fog	B-D 166 349 FT 5-2.5	2C-1.2 B-D 1 FT 9	10 110 71
Indoor use	10 110 71	Neoprene Headband	 Clear	Abrasion Resistant / Anti-fog	B-D 166 349 FT 5-2.5	2C-1.2 B-D 1 FT 9	10 110 70
Indoor use	10 110 72	Fabric Headband	 Clear	Abrasion Resistant / Anti-fog	B-D 166 349 FT 5-2.5	2C-1.2 B-D 1 FT 9	10 110 70

LG Goggles




- Impact resistant polycarbonate (PC) lens for excellent protection against flying particles, coarse dusts, liquid droplets, mists and sprays
- Lightweight design
- Soft seal and easily adjustable headband fits a wide variety of workers
- Chemistry version with an acetate Fog-Ban™ lens
- Weight: 75 gr to 79 gr



LG10










LG20

Application	Product Code	Description	Lens	Lens coating	Frame marking	Lens marking
Indoor use	10 055 04	LG10 No Ventilation	 Clear (PC)	-	B	B-D 1 B
Indoor use	10 055 07	LG20 Indirect Ventilation	 Clear (PC)	-	3.B	B-D 1 B
Indoor use	10 055 09	LG20 Indirect Ventilation	 Clear (PC)	Abrasion Resistant / Anti-fog	3.B	B-D 1 B

V-Maxx™ Goggles






- Fits a wide variety of workers and can be worn over prescription eyewear and with half-mask respirators
- Selection of various strap materials to ensure stability for all types of environments (i.e. neoprene strap for use in chemical industry)
- Rotating strap attachments for easier use with hard hats
- Special concept of indirect ventilation to comply with splash-resistance test
- Lens options in polycarbonate (PC) or acetate
- Lens protectors available to increase V-Maxx lifetime

Application	Product Code	Description	Lens	Lens coating	Frame marking	Lens marking
Indoor use	10 061 92	Indirect Ventilation Elastic Headband	 Clear (PC)	Abrasion Resistant	3.4.9.B	3 - 1.2 D1B 9
Indoor use	10 061 93	Indirect Ventilation Elastic Headband	 Clear (PC)	Abrasion Resistant - Anti-fog	3.4.9.B	3 - 1.2 D1B 9
Indoor use	10 061 94	Indirect Ventilation Neoprene Headband	 Clear (PC)	Abrasion Resistant - Anti-fog	3.4.9.B	3 - 1.2 D1B 9
Indoor use	10 061 95	Indirect Ventilation Elastic Headband	 Clear (PC)	Abrasion Resistant - Anti-fog	3.4.5.9.B	3 - 1.2 D1B 9
Indoor use	10 061 96	No vent - foam Elastic Headband	 Clear (PC)	Abrasion Resistant - Anti-fog	3.4.5.9.B	3 - 1.2 D1B 9
Indoor use	10 075 06	V-Maxx CHEMISTRY Indirect ventilation - Acetate Lens - Neoprene Headband	 Clear (Acetate)	Abrasion Resistant - Anti-fog	3.4.F	D1F
Welding/Foundries	10 081 11	V-Maxx Welding	 IR 5 (PC)	Abrasion Resistant - Anti-fog	3.4.9.F	5 B-D 1B 9

Flex Seal® Goggles



- Soft silicone body for individual perfect fit
Silicone:
 - Is lightweight & very comfortable to wear for long periods of time
 - Remains soft and supple even in extreme hot or cold temperatures
 - Conforms to any facial profile thus ensuring a snug slip-free fit, even over prescription spectacles
 - Wears better and doesn't move when the wearer sweats, being both temperature and heat resistant
- Smart design for ultimate comfort
 - Personally adjustable frame with pivoting clips and adjustable headband for fast and easy fitting
 - Quick release clips to remove the headband and lens in order to clean the goggle components
 - Indirect ventilation system for channelling and directing air flow to minimise fogging
 - Lightweight, sturdy and flexible frame
- Wrap around lens for perfect panoramic vision
 - Best designed replaceable lens on the market and compatible with prescription spectacles
 - Very high quality lenses provide 99.9% UV filtration
 - Unique frame is designed to be compatible with prescription spectacles and/or half-mask respirators

Application	Product Code	Description	Lens	Lens coating	Frame marking	Lens marking	Replacement lens
Indoor use	10 113 81	Blue Body - Neoprene Headband	 Clear	Abrasion Resistant Anti-fog	B-D 166 349 BT 5	2C-1.2 B-D 1 BT 9	10 113 85
Indoor use	10 113 33	Blue Body - Fabric Headband	 Clear	Abrasion Resistant Anti-fog	B-D 166 349 BT 5	2C-1.2 B-D 1 BT 9	10 113 85
Indoor use & Outdoor use	10 113 85	Replacement Lens	 Clear	Abrasion Resistant Anti-fog	B-D 166 349 BT 5	2C-1.2 B-D 1 BT 9	10 113 81

Supervizor™

A robust, heavy-duty, helmet-hyphen mounted face shield range with hearing protection compatibility

- Compatible with wide range of helmet designs (size, shape and geometry)
- Visor fixing method is secure and allows easy visor replacement
- Full face protection : optional chinguard versions available for added protection
- Creased visor eliminates gaps and visor profile follows contours of the face for maximum protection, allowing full unrestricted head movement
- Design allows the visor to be tilted whilst leaving the earmuffs in place covering the ears. It also facilitates the wearing of the earmuffs without compromising the attenuation, whilst maintaining a maximum area of facial coverage
- Visor selection can be tailored to the specific hazard/application: mechanical, chemical, heat etc.



Visor
1002325



Visor
1002330

Application	Product Code	Name	Description	Weight	Marking
Liquid - Molten Metal Impact 120m/s	10 023 02	SA660	Helmet-mounted Visor Holder (plastic)	125g	D.1663.9.B
Heavy Mechanical Tasks	10 023 12	SV9PC	Clear Polycarbonate Visor (230mm)		D.1.B.3.9
Welding	10 023 30	SV9A5W	Green Shade 5 Acetate (200mm)		5.D.1.F.3
Liquid - Impact 120m/s	10 023 05	SA66	Helmet-mounted Visor Holder (metal)	110g	D.1663.B
Molten Metal Radiant Heat (IR)	10 023 25	SV9PGFH	Gold-Coated Abrasion-Resistant Polycarbonate (230mm)		4-5.D.1.B.3.9.K 3-5.D.1.B.3.9.K

Clearways™

Safe, practical, economical

- The Clearways combination offers both strength and durability
- Only 160g, it is comfortable enough to wear all day
- Integral visor fitting ensures extra protection against chemical
- Economical replaceable visors available in acetate or polycarbonate



Application	Product Code	Name	Description	Weight	Marking
Liquid - Impact 120m/s	10 023 41	CB20	Brow guard With Ratchet Headband	94g	D.3.B




Application	Product Code	Name	Description	Visor Marking
Heavy mechanical tasks	10 023 53	CV83P	Clear Polycarbonate Visor (200mm)	D.1.B.3
Chemical Projections	10 023 60	CV84A	Clear Acetate Visor (200mm)	D.1.F.3

Bionic® Visors

Hard hat adapter accessory

- Provides full protection of the head and face; Attaches quickly and easily to a variety of competitive hard hats





Application	Product Code	Description	Lens	Lens coating	Visor marking
Heavy Mechanical Tasks	10 116 25	Polycarbonate Uncoated Visor	 Clear	-	2C-1.2 B-D 1 BT 3.9
Chemical Projections	10 116 26	Acetate Uncoated Visor	 Clear	-	B-D 1 FT 3
Heavy Mechanical Tasks	10 116 27	Polycarbonate Visor	 Clear	Abrasion Resistant Anti-fog	2C-1.2 B-D 1 BT 3.9

Bionic® Face Shield



- Superior protection
- Extended top of head and chin protection
- Large superior quality visors for maximum visibility
- Easily replaceable visors available in different materials, tints and finishes to better suit individual needs
- Comfortable fit with goggles or respirators
- Locking mechanism for more complete safety
- Dielectric design
- Ultimate Comfort
- Incredibly adjustable (2784 possible wearer positions)
- Fully adjustable ratchet headgear
- Fully adjustable headband
- Multiple visor tilt positions
- Extra soft cushioning on all parts of the shield in contact with the head
- Breathable extra-soft sweatband is removable for easy washing and replacement

Application	Product Code	Face shield Description	Lens	Lens coating	Shell marking	Visor marking
Heavy Mechanical Tasks	10 116 23	Bionic Face shield with uncoated Polycarbonate Visor	 Clear	-	B-D 166 389 BT 5	2C-1.2 B-D 1 BT 3.9
	10 116 24	Bionic Face shield with Polycarbonate Visor	 Clear	Abrasion Resistant Anti-fog	B-D 166 389 BT 5	2C-1.2 B-D 1 BT 3.9

Hard Hats



White



Green



Orange



12920001

Protection for Your Head

Wherever there is a potential for falling objects, flying objects, or impact of bumps, Sperian should be there. Adjustable, imprintable and affordable, Sperian has the hard hat to meet your needs.

- Low profile, well-balanced high density polyethylene shell
- Replaceable, 4-point, nylon suspensions available in ratchet or PresLock adjustment options
- Patented shock-absorbing hangers to absorb shock evenly
- Replaceable, sponge padded sweatband
- Downward-angled nape strap for secure fit
- Universal accessory slots for cap attachments
- Custom imprinting available for the front, back and sides
- Meets or exceeds ANSI Z89.1 – 2003 standard. Type 1 Impact requirements and Class G and E electrical
- Made in the USA

Product Code	Description
12210100	82AC Orange Alpha - Cap
12210250	83ACRW Alpha Cap w/HC812 Ratchet Suspension
12210102	82AC White Alpha Cap
12210099	82AC Green Alpha Cap

Replacement Parts

Product Code	Description
12920001	HC426 Chin Strap

Sperian Clear™ Kits

Sperian Clear 500ml Spray Bottle

- Alcohol and Silicone Free
- 10 113 78



Sperian Clear Lens Cleaning Tissues(500)

- Alcohol and Silicone Free
- 10 113 79



Sperian Clear Towelette Dispenser(100)

- Alcohol and Silicone Free
- 10 113 32



Sperian Clear Disposable Station

- Alcohol and Silicone Free
- 10 113 80



Product Code	Description
1011378	500ml Spray Bottle, Alcohol and Silicone Free
1011379	Lens Cleaning Tissues (500), Alcohol and Silicone Free
1011380	Disposable Station, Alcohol and Silicone Free
1011332	Towelette Dispenser (100), Alcohol and Silicone Free

Fog Eliminator Cloths













- Formulated to effectively protect lenses from all types of fogging caused by cold, high humidity or sudden temperature changes
- Safe for all surfaces, including polycarbonate and glass
- Each cloth provides multiple applications
- Streak and film free, alcohol and silicone free
- Non-flammable and non-toxic
- Made in USA

Product is sold in cases of 8 boxes. Each box containing 100 pieces.

Product Code	Description
16779	Titmus Fog Eliminator Cloths



Reference: Lens Tint Selection & Technical Information

Lens Tint Selections		Lenses	Clear	Cappuccino	HDL Yellow	TSR™ Gray	Blue Mirror	I/O Blue Mirror	Silver Mirror	I/O Silver Mirror	Dark TCG	IR/PC™ Shade 3.0	IR/PC™ Shade 5.0
Specifications	VLT (Visual Light Transmission)		92%	27%	88%	22%	12%	45%	12%	45%	18%	14%	2%
	UV Absorption >99.9% (unless otherwise noted)		99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
	Meets the requirements of Z80.3 for Traffic Signal Recognition			•		•	•	•	•	•	•		
Applications	General purpose applications where impact protection is required												
	Outdoor applications where sunlight and glare cause eye strain and fatigue												
	High visibility and good contrast in low light conditions. Blue light protection and increased visual depth perception												
	High performance lens for indoor/outdoor use to reduce artificial and solar glare												
	Outdoor use when there is a risk of electric arc-flash												
	For use when torch brazing and flame cutting to filter optical radiation												

A Guide to the Properties of Face Shield Replacement Visors





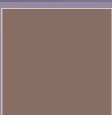


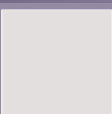




⚠ WARNING: Note: Face shields are secondary protectors, and must always be worn in conjunction with protective spectacles or goggles.

		Polycarbonate	Propionate	Acetate
Properties	Impact Resistance	Best	Better	Better
	Weather Resistance	Better	Good	Good
	Scratch Resistance	Good	Better	Better
	Acid Resistance	Good	Better	Good
	Alkaline Resistance	Good	Better	Good
	Solvent Resistance	Good	Better	Good
	Heat Resistance	Best	Better	Good
	Maximum Temperature Use	250-280°F	175-200°F	150-180°F

Reference: Lens Variations

V
V
V

Reference

Clear EN166 - EN170		Application : For indoor use where eye protection is required against most commonly encountered hazards (i.e. impact protection).	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 92% - Lens Marking : 2(C)-1.2 B-D.1.F Lens Material : Polycarbonate (unless described as Acetate)
I/O Silver (Indoor/Outdoor) EN166 - EN170 - EN172		Application : High performance lens for indoor/outdoor use to reduce artificial and sunlight glare. Provides protection against most commonly encountered hazards.	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 45% - Lens Marking : 5-1.7 B-D.1.F Lens Material : Polycarbonate
TSR Grey (Traffic Signal Recognition) EN166 - EN170 - EN172		Application : For outdoor use when sunlight and glare can cause eye fatigue. Meets the requirements of colour Traffic Signal Recognition. Provides protection against most commonly encountered hazards.	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 22% - Lens Marking : 5-2.5 B-D.1.F Lens Material : Polycarbonate
HDL Yellow (High Definition lens) EN166 - EN170		Application : To provide high visibility and good contrast in low light conditions. Provides protection against most commonly encountered hazards.	Absorbs > 99.9% of UV radiation up to 400nm. VLT*: 87% - Lens Marking : 2-1.2 B-D.1.F Lens Material : Polycarbonate
Dark TCG (True Colour Grey) EN166 - EN170 - EN172		Application : For outdoor use when sunlight and glare can cause eye fatigue. Allows excellent colour discrimination. Provides protection against most commonly encountered hazards.	Absorbs 99.9% of UV radiation up to 385nm. VLT*: 17% - Lens Marking : 5-3.1 B-D.1.F Lens Material : Polycarbonate (unless described as Acetate)
Cappuccino EN166 - EN170 - EN172		Application : For outdoor use when sunlight and glare can cause eye fatigue. Meets the requirements of colour Traffic Signal Recognition. Provides protection against most commonly encountered hazards. The lens colour enables better eye adaptation to light changes while increasing contrasts.	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 27% Lens Marking : 5-2.5 B-D.1.F Lens Material : Polycarbonate
Blue Mirror EN166 - EN170 - EN172		Application : For outdoor use when bright sunlight and glare can cause eye fatigue (the mirror coating reflects the glare for better protection).	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 23% - Lens Marking : 5-2.5 B-D.1.F Lens Material : Polycarbonate
Orange Mirror EN166 - EN170 - EN172		Application : For outdoor use when bright sunlight and glare can cause eye fatigue (the mirror coating reflects the glare for better protection).	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 35% - Lens Marking : 5-2.0 B-D.1.F Lens Material : Polycarbonate
Silver Mirror EN166 - EN170 - EN172		Application : For outdoor use when bright sunlight and glare can cause eye fatigue. Meets the requirements of colour Traffic Signal Recognition. Provides protection against most commonly encountered hazards.	Absorbs > 99.9% of UV radiation up to 385nm. VLT*: 12% - Lens Marking : 5-3.1 B-D.1.F Lens Material : Polycarbonate
Blue Cobalt EN166 - EN171		Application : For high heat applications such as furnaces or foundries. Reduces the glare from molten metal or glass, and provides infrared protection. Not suitable for impact protection.	VLT*: 1.5% Lens Marking : 4-6 B-D.1 Lens Material : Mineral
I.R. Shade 1.7 • 3 • 4 • 5 EN166 - EN169 - EN171		Application : For welding applications : Shade 1.7 = Welder's Assistant. Shades 3 & 5 = oxy-cutting, gas welding.	VLT*: 1.7 = 51% • 3 = 17% • 4 = 6% average • 5 = 2% • 6 = 0.7% Lens Marking : 4-1.7 / 4-3.0 / 4-4 / 4-5 B-D.1.F Lens Material : Polycarbonate
Reinforced Glass EN166		Application : For dusty or chemical environments where no protection against impact is needed (foundry cleaning, chemistry lab). Excellent protection against abrasion and chemical splashes. Not suitable for impact protection.	VLT*: 94% Lens Marking : B-D.1.S Lens Material : Tempered Mineral
Welding Glass Shade 5 EN166 - EN169		Application : For welding. Provides infrared protection. Not suitable for impact protection.	VLT*: 2% Lens Marking : 5 B-D.1 Lens Material : Mineral
Green 6-2.5 EN166 - EN172		Application : For outdoor use when sunlight and glare can cause eye fatigue. Provides protection against most commonly encountered hazards, with the added benefit of IR filtration where radiant heat sources are present.	VLT*: 23% Lens Marking : 6-2.5 B-D 1 FT Lens Material : Polycarbonate

Reference: Standards - 1

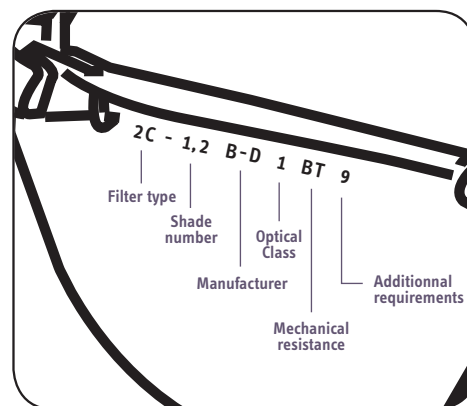
Technical performance standards

Basic standards	Standards by type of filters (lenses)	Welding
EN166 Technical Performance Standards	EN169 Welding filters	EN175 Equipment for eye and face protection during welding and allied processes
EN167 Methods for optical tests	EN170 Ultraviolet filters	
EN168 Methods for tests other than optical	EN171 Infrared filters	
	EN172 Sunglare filters for industrial use	

Meaning of lens marking

Filter type	3	Code N°: Indicates the type of filter 2 & 3 = UV 4 = IR 5 & 6 = solar
Shade number	C	Enhanced color recognition for lenses category 2 or 4
Manufacturer	1.2	Shade number: Indicates the shade of the lens (between 1.2 & 8 for spectacles & goggles)
Optical Class	B-D or D	Identification of the manufacturer (Sperian)
	1	Optical class (1 = permanent wear, 3 = occasional wear)
Mechanical resistance	F	Symbol for mechanical strength (F for low impact)
	T	Symbol for resistance to high speed particles at extremes of temperature (-5° C & +55° C) Follows Impact grade
	8	Symbol for resistance to short circuit electric arc
	9	Symbol for non-adherence of molten metal & resistance to penetration of hot solids
Additional requirements	K	Symbol for resistance to surface damage by fine particles
	N	Symbol for resistance to fogging of lenses
	R	Symbol for enhanced reflectance
	O	(O) for original lens, (V) for replacement lens (optional)

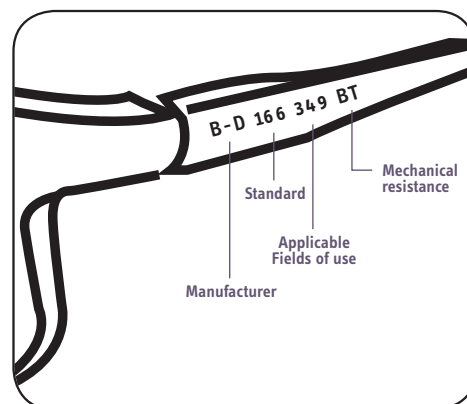
Example of lens marking



Meaning of frame marking

Manufacturer	B-D or D	Identification of the manufacturer (Sperian)
Standard	166	N° of the standard
Applicable Fields of use	xxx	Field(s) of use : 3 = Liquids (droplets or splashes) 4 = Large dust particles (Dust with a particle size > 5µm) 5 = Gas & fine dust particles (Gases, vapours, sprays, smoke and dust with a particle size < 5µm) 8 = Short circuit electric arc (Electric arc due to short circuit in electrical equipment) 9 = Molten metals & hot solids (splashes of molten metals and penetration of hot solids)
Mechanical resistance	F	Symbol for mechanical strength (F for high speed particles, low energy)
	B(T)	Symbol for resistance to high speed particles at extremes of temperature (-5° C & +55° C)
	H	Symbol indicating that the eye-protector is designed to fit a small head
Highest shade number compatible with the frame	2.5	N° indicating the highest lens scale number(s) compatible with the frame Goggle and face shield only

Example of frame marking



Reference: Standards - 2

Mechanical resistance

Impact level	Speed of ball	Symbol	Type of eye-protector
High energy impact	190 m/s	A T*	Polycarbonate face shields
Medium energy impact	120 m/s	B T*	Face shields & goggles
Low energy impact	45 m/s	F T*	Face shields, goggles & spectacles
Increased robustness	12 m/s	S	Spectacles with mineral lenses

* Resistance to high speed particles at extremes of temperature

Protection against radiation

	Code N° (type of filtration)	Shade number*	European standard	Applications	Lenses to be used
Ultraviolet (UV)	2 to 3 3 for EN 170:1992 products, replaced by 2C for EN 170:2002	1.2 to 5	EN170	Welding - Short circuit electric arc - Sunlight	Clear HDL Yellow
Infrared (IR)	4	1.7 to 7	EN171	Arc welding Glass manufacturing foundry work - Sunlight	IR Shade : 1.7 - 3 - 5 Blue cobalt
Solar filter	5 to 6	1.7 to 4	EN172	High intensity solar glare Outdoor work	I/O Silver TSR Grey Cappuccino Blue Mirror Orange Mirror Silver Mirror
Welding filter	1.7 to 7	1.7 to 7	EN169	Welder's assistant (Shade 1.7) Braze welding (Shade 3 to 5) Oxy-cutting (Shade 5 to 7) Arc welding (Shades > 7 require face shields)	IR Shade : 1.7 - 3 - 5 Welding Glass

* the higher the number, the darker the tint of the lens

Optical class of the lens

Tolerance to optical power	Lens marking	Sperian solution
+/- 0.06 dioptries (permanent wear)	1	All Sperian lenses except Armamax AM
+/- 0.12 dioptries (occasional wear)	2	-
+/- 0.25 dioptries (exceptional wear)	3	-

Other specific applications

Hazards	Lens marking	Type of eye-protector
Liquids	3	Face shields (projections) Goggles (droplets)
Large dust particles	4	Goggles
Gas and fine dust particles	5	Goggles (unvented)
Short circuit electric arc	8	Face shields minimum thickness 1.2 mm (EN166:1995) 99,9% UV filtration
Molten metal and hot solids	9	Goggles - face shields

Optional specifications

Hazards	Symbol	Lens
Resistance to damage by fine particles	K	Clear, clear Fog-Ban, IR
Fogging	N	Fog-Ban
Enhanced reflectance	R	Gold coated visor



* Sperian Safety Eyewear products displayed with this symbol in this catalogue have been tested and found to be in conformity with all of the applicable requirements for the device(s), as listed in the Sperian product specifications... specifically:

ANSI Z87.1:2003 – American National Standard - Occupational and Educational Eye and Face Protection Devices, which includes, frame and lens testing, as applicable, High Mass Impact, High Velocity Impact ("Z87+"), Drop Ball Impact, and Penetration, Opticals, Flammability, etc.

And all Sperian products meet or exceed ANSI Z87+ (High Impact) safety standards, and many are certified CSA Z94.3.



WORLD LEADER IN EMERGENCY EYE CARE

Sperian® is the new name of Fend-all. Since 1950, Sperian Protection and its predecessors have manufactured and distributed leading safety and health products worldwide. Sperian is the well-respected market leader in portable eyewash stations and is recognized for its wide range of emergency eyewash products including the **first** self-contained gravity-fed station and the **first** heated self-contained gravity-fed station.

When Seconds Count, Portable Matters

The need for immediate flushing requires the installation of emergency eyewash devices to be installed in accessible locations that require no more than 10 SECONDS to reach. For a strong acid or strong caustic, the eyewash should be immediately adjacent to the hazard. Sperian® self-contained, portable eyewash stations require no plumbing for easy and affordable placement near any workplace hazard, and deliver a buffered saline solution superior to tap water for emergency eye care. Ordinary tap water, used in plumbed or some tank-type eyewash devices, may contain harmful bacteria or contaminants that can cause additional eye damage. A buffered saline solution is the most effective flushing fluid for emergency first aid.

Porta Stream™ II

Porta Stream II offers versatile portability and 15-minutes of uninterrupted flushing – without costly plumbing. Porta Stream's simplicity of installation and operation has made it a popular choice. Self-contained, each model features a nozzle strap that is easily removed to activate flushing, leaving hands free to hold eyelids open. Porta Stream II is supplied with either 2.07L of Sperian Saline Concentrate which, when mixed with tap water provides 22.7L of Sperian Saline solution, or Sperian Water Additive, enough for 53 - 61L of water. This portable unit may be mounted on a wall, mobile cart or mobile stand.



Primary Emergency Eyewash

Fendall Porta Stream™ II

- Easy installation with no plumbing required. Can be easily and affordably placed near most workplace hazards with single bracket mounting device or transported with optional universal cart or universal stand. Molded handle accepts hanging bracket for vertical or horizontal surface installation
- Versatile flushing fluid options include Sperian Saline – a buffered, saline solution superior to tap water for emergency eye care, and Sperian Water Additive
- Large 16 gallon (60.5L) capacity permits thorough flushing by providing 0.4 gpm over the entire 15-minute flushing period required by ANSI Z358.1-2004
- Nozzles cover a wide area around the eyes
- Simple strap design is easily removed for hands-free flushing, leaving hands free to hold eyelids open
- Properly installed, the system may be safely leaned upon during use
- Large fill hole/lockable fill cap to simplify refilling and cleaning. Reduces risk of possible tampering
- Easy-to-use design features simple, highly visible operating instructions on the unit itself
- Saline Concentrate requires 6-month maintenance cycle. Water Additive requires a 4-month maintenance cycle

Product Code	Description
32-000200-0000	Eyewash Station (English) with Saline Concentrate
32-000230-0000	Eyewash Station (English) with Water Additive

15-Minute Flush Time

- Meets ANSI Standard
- 3-6 month maintenance cycle



Secondary Emergency Eyewash

Fendall Porta Stream™ I

- Delivers 6 minutes of uninterrupted, hands-free flushing – without costly plumbing
- Easy installation with no plumbing required. Can be easily and affordably placed near most workplace hazards with single bracket mounting device or transported with optional universal cart or universal stand. Molded handle accepts hanging bracket for vertical or horizontal surface installation
- Supplied with either 70 oz. (2.07L) of Saline Concentrate which, when mixed with tap water, provides 6 gallons (22.7L) of buffered, saline solution superior to tap water for emergency eye care solution, or 8 oz. of Water Additive, enough for 14-16 gallons of water
- Nozzle strap is easily removed for hands-free flushing, leaving hands free to hold eyelids open
- Low maintenance with one-piece, molded construction and no moving parts
- Large fill hole simplifies refilling and cleaning
- Easy-to-use design features simple, highly visible operating instructions on the unit itself
- Saline Concentrate requires 6-month maintenance cycle. Water Additive requires a 4-month maintenance cycle
- **Does not meet ANSI Z358.1-2004 15-minute flushing requirement**

Product Code	Description
32-000100-0000	Eyewash Station (English) with Saline Concentrate
32-000130-0000	Eyewash Station (English) with Water Additive

6-Minute Flush Time

- Great for dust or particles
- 3-6 month maintenance cycle
- Intended to support, not replace, primary plumbed or self-contained units.



Shower

Operational in Less Than 2 Minutes

Provides decontamination facilities in accordance with OSHA standard 1910.120 without distracting emergency responders from their primary task.

Suitable for Emergency Response Vehicles

The Sperian® Emergency Decontamination Shower is ideal for a variety of locations, including construction sites, loading docks, agricultural locations, and other emergency response areas.



Emergency Decontamination Shower

- Quick deployment – with one person – fully operational in less than two minutes
- Assures users of thorough decontamination with 5 gallon per minute flow rate at 40-psi water supply pressure
- Accommodates emergency responder in full chemical gear with SCBA
- Over 120-gallon capacity provides collection for up to 30 minutes of shower use
- Connects to standard garden hose
- Fully deployed and operational within ten seconds of turning on the water
- Entire system can be stored in convenient carrying bags on virtually any response vehicle (requires < 5 cu. ft. of storage each)
- Optional drench hose can be used to assist the emergency responder or victim with decontamination or drenching; otherwise can be used with a standard garden hose



Product Code	Description
32-001180-0000	Emergency Shower Only (Carry Bag Not Included)
32-001182-0000	Retention Pool Only (Carry Bag Not Included)

Concentrate & Saline Solution



Concentrate

- Mix with clean, potable water (10:1 ratio)
- Creates a preserved, buffered, saline solution

Product Code	Description
32-000509-0000	Saline Concentrate for Use with Fendall Porta Stream I
32-000513-0000	Saline Concentrate for Use with Fendall Porta Stream II

*Shelf life determined by date of manufacture. Always check product expiration date

Saline Solution

- Use directly from container (1 gal, 3.8L) to refill the eyewash device. No mixing or measuring required
- Preserved, buffered, pH balanced, saline solution

Product Code	Description
32-000502-0000	Saline Solution (Premixed) for Use with Fendall Porta Stream I, II

*Shelf life determined by date of manufacture. Always check product expiration date

Water Additive



Water Additive

- Mix with clean potable water
- One bottle (8 oz.) suitable for 14-16 gallons
- 30-month* shelf life (unopened)
- Sold in cases of four with tamper evident seals

Product Code	Product codeDescription
32-001100-0000	Water Additive for Use with All Portable Devices

*Shelf life determined by date of manufacture. Always check product expiration date

Accessories

Dust Cover

- Protects eyewash basin from dirt, dust and debris
- Attaches to the eyewash pull strap
- Cover and pull strap are removed in one motion

Product Code	Description
32-000517-0000	Dust Cover for Fendall Porta Stream I, II



Fluid Disposal Cart

- Allows easy collection of used flushing fluid
- Concave top surface with center drain
- Dual wheels, molded handle for easy portability

Product Code	Description
32-000511-0000	Disposal Cart for Use with Fendall Porta Stream I, II and Fendall Flash Flood



Universal Eyewash Cleaning Kit

- For use with all tank-type, eyewash stations
- Allows thorough eyewash device cleaning
- Clean prior to refilling, to remove contamination
- Helps remove contaminants from tank interior

Product Code	Description
32-000518-0000	Cleaning Kit for Use with All Tank-Type, Eyewash Stations



Waste Container

- 28 gallon waste container fits securely on cart

Product Code	Description
32-001061-0000	Waste Container for Use with Universal Cart #32-001060-000



Universal Eyewash Stand

- Inexpensive alternative to wall mounting
- Versatile stand can be mounted to a floor or be used as free standing
- Compact and easy to assemble (assembly time – 5 minutes or less)
- All assembly parts are included
- Lightweight, sturdy steel tubing design (25 lbs)

Product Code	Description
32-001065-0000	Eyewash stand for use with Fendall Porta Stream I, II



Universal Eyewash Cart

- Provides quick, easy portability for self-contained, gravity-fed emergency eyewash devices
- Reliable, hand-truck design ensures durability

Product Code	Description
32-001060-0000	Eyewash Cart for Use with All Portable Devices



Reference: Compliance Regulations

15 MINUTE FLUSH

The type of emergency eyewash device, the flushing solution used, and the maintenance of that device can greatly affect the treatment and eventual recovery of an injured eye. Safety professionals can choose from a variety of delivery systems and flushing fluids when selecting emergency eyewash devices. The primary eyewash unit required for a hazard area must meet the requirements set by ANSI Z358.1-2004. Eyewash stations and bottles that supply less than the minimum flushing requirements of ANSI Z358.1-2004 are intended to support, not replace, primary units. These supplemental or personal eyewash units are referred to as secondary devices.

10 SECOND RUSH

Experts agree the most important first aid procedure for eye contact with hazardous materials is abundant irrigation within seconds. The need for immediate flushing requires the installation of emergency eyewash devices in accessible locations that require no more than 10 SECONDS to reach. Studies have shown there is a significant difference in the outcome of chemically burned eyes that receive prompt irrigation and those that did not undergo immediate flushing – patients receiving prompt irrigation required less surgery, had shorter hospital stays, and faster recoveries.

COMPLIANCE REGULATIONS

OSHA Requirements

OSHA specifies requirements for workplace eye hazard areas. High incident eye injury areas have activities involving use of paints and solvents, battery charging, tool parts washing, laboratory work, chemical storage, and chemical pumping and mixing. Injurious materials may be present in solid, liquid, powder, mist or vapor form.

Hazard Communication Standard, 29 CFR 1910.1200, requires employers to identify chemicals used in the workplace. This regulation further mandates that employers provide information to employees regarding appropriate safety equipment and emergency procedures for the safe use of workplace chemicals. CFR Title 29, Parts 1901 to 1910 are applicable. Part 1910.151(c) states: "Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use."

ANSI Standard

The ANSI Z358.1-2004 Standard for Emergency Shower and Eyewash Equipment is the definitive standard for meeting the OSHA requirement for "suitable facilities."

ANSI Z358.1-2004 states specific installation requirements for plumbed/self-contained eyewashes.

It is the employer's responsibility to ensure that eyewashes shall be in accessible locations that require no more than 10 seconds to reach.

The eyewash unit shall be located on the same level as the hazard and the path of travel shall be free of obstructions that may inhibit the immediate use of the equipment. For a strong acid or strong caustic, the eyewash should be immediately adjacent to the hazard.

Performance requirements for plumbed/self-contained eyewash units are also specified by ANSI Z358.1-2004:

Plumbed and self-contained eyewash equipment shall be capable of delivering flushing fluid to the eyes not less than 1.5 liters (0.4 gpm) per minute for 15 minutes.

A means shall be provided to ensure that a controlled flow of flushing fluid is provided to both eyes simultaneously at a velocity low enough to be non-injurious to the user.

Nozzles shall be protected from airborne contaminants. Whatever means is used to afford such protection, its removal shall not require a separate motion by the operator when activating the unit.

The eyewash unit shall be designed to provide enough room to allow the eyelids to be held open with the hands while the eyes are in the flushing fluid stream.

Visit www.ansi.org for complete ANSI Z358.1-2004 details

Reference: Product Features Matrix

Product code	Description	Primary Device	Secondary Device	Personal Device	Decontamination Shower	Portable	Sealed-Fluid Cartridge	Sterile Saline Solution	Buffered Saline Solution	Saline Concentrate	Water Additive	Refillable	Heated/Freeze Protected	Meets ANSI 15-Min. Requirement	SEI Certified
32-000200-0000	Fendall Porta Stream II Eyewash Station (English) w/Saline Concentrate	•				•				•		•		•	•
32-000230-0000	Fendall Porta Stream II Eyewash Station (English) w/Water Additive	•				•					•	•		•	•
32-000100-0000	Fendall Porta Stream I Eyewash Station (English) with Saline Concentrate		•			•				•		•			
32-000130-0000	Fendall Porta Stream I Eyewash Station (English) with Water Additive		•			•					•	•			
32-001180-0000	Emergency Shower Only (Carry Bag Not Included)				•	•									
32-001182-0000	Retention Pool Only (Carry Bag Not Included)					•									
32-000502-0000	Saline Solution (Premixed) for Use w/Fendall Porta Stream I, II								•						
32-000513-0000	Saline Concentrate for Use with Fendall Porta Stream II									•					
32-000509-0000	Saline Concentrate for Use with Fendall Porta Stream I									•					
32-001100-0000	Water Additive for Use with all Portable Devices										•				

Reference: Eyewash Options

SPERIAN® SALINE SOLUTIONS

Sperian's world-renowned delivery systems and devices utilize a buffered saline solution, both of which are superior to tap water or water with an additive for emergency eye care. Unlike tap water that may contain contaminants that can further irritate or damage the eyes, saline solution is purified and physiologically balanced to the pH and salinity of human tears.

FEATURES

BENEFITS

• Buffered	Ensures neutral pH of flushing fluid and reduces likelihood of fluid causing additional damage to an injured eye
• Saline solution	Minimizes irritation and maximizes flushing comfort with a solution that is physiologically balanced to the pH and salinity of human tears
• Contaminant-free	Does not contain irritants like chlorine, rust and various microbial contaminants that may be found in tap water
• User-friendly	Allows maximum user comfort and flushing effectiveness over the entire 15-minute flushing period required by ANSI Z358.1-2004
• Versatile	Saves maintenance costs with quick fluid change options

OTHER SPERIAN SOLUTION OPTIONS

Sperian Concentrate

Sperian Concentrate creates a flushing fluid solution that reacts better with the eye than water or water with an additive does. Sperian Concentrate contains special additives to provide a cost-effective solution for eyewash refills. When mixed in the proper ratio with potable (drinking) water, Sperian Concentrate provides a preserved, buffered, saline solution.

Sperian Water Additive

When mixed with potable water, Sperian Water Additive provides a preserved solution for use in self-contained eyewash devices. Sperian Water Additive mixed with water is cost-effective, but does not impact possible contaminants. Sperian Water Additive is non-toxic in the recommended concentration.

EMERGENCY EYEWASH CONSIDERATIONS

Cost-Plumbed vs. Self-Contained

Once potential hazards have been identified, the employer must select and install emergency eyewash units in appropriate locations throughout the facility that require no more than 10 seconds for any person using hazardous materials to reach.

Depending on the number of hazard locations and facility layout, installation of plumbed emergency eyewash devices within 10 seconds of potential hazards can be cost-prohibitive. Plumbed units require a readily available water source close at hand and a drain to service the unit.

Self-contained emergency eyewash devices use sealed fluid cartridges or a gravity-fed, tank design with no costly plumbing needed. Self-contained systems provide affordable, portable placement within 10 seconds of most workplace hazards.

Maintenance

Proper maintenance of eyewash devices is essential. ANSI Z358.1-2004 requires that plumbed units be activated weekly to verify proper operation. Self-contained devices must be inspected and maintained according to manufacturer's instructions.

Fluid in devices using water mixed with an additive or a factory prepared liquid concentrate must be changed in accordance with the manufacturer's directions.

All emergency eyewash systems must be inspected at least annually to ensure conformance with ANSI Z358.1-2004 requirements.

Flushing Fluid Quality

While tap water is widely available, it is not the preferred solution for emergency eye flushing. Tap water used in plumbed systems or some tank-type eyewashes may contain various particulates or harmful contaminants.

Particles in the flushing stream can injure the eye and may obstruct fluid flow. Tap water may also contain various microorganisms and bacterial contaminants from the interior surface of water pipes that can pose a threat to injured eye tissue.

The ideal solution for emergency eye flushing is 100% buffered pH balanced saline solution which minimizes the extent of damage caused by injurious materials.



! WARNING ! Sperian Laser products should be used only in conjunction with the manufacturer's instructions. Failure to follow such instructions and warnings may result in serious personal injury and serious illness, including blindness.

DESIGNED FOR SUPERIOR LASER PROTECTION, COMFORT AND STYLE

Sperian® is the new brand name for Glendale®. Since 1968, we have been the worldwide leader in laser protective eyewear, patient care products and specialty filters for industrial, military, communications, medical and R&D applications. As the leader in manufacturing and design of laser eyewear and specialty filters, we strive to bring you the most advanced technology, the best value and maximum protection in all the products we produce.



Sperian Protection is the laser leader in polymer lenses, glass lenses, patient care products and specialty markets, with 40 years of experience serving the laser community. Our frames are designed for comfort and style, matched with world-renowned dyes to maximize visibility and protection. New products include our superior HT™ (High Transmission) filters, new Crystal Clarity™

filters that provide unsurpassed visual acuity and expanded wavelength coverage for our polymer windows. For 2009, we are very pleased to introduce our Sperian Milan™ line of eyewear, with a unique “personalize your fit” design. Please visit us at www.glendalelaser.com for detailed information on our current and new products.

Polymer Laser Eyewear

Stylish, Fashion-Inspired Laser Protection

A new frame designed with fashion, style, comfort and protection in mind.

This eyewear is designed with wrap-around lenses and sleek, contemporary frame styling with multiple adjustments that allow you to create a comfort fit.

NEW! Sperian Milan™

- Lightweight frame with unparalleled comfort
- Spring-hinge temples for frame stress relief and durability
- Adjustable temples and nose bridge to fit various facial and nasal profiles
- Anti-fog and anti-scratch coating comes standard with each lens
- Available with most of our High Transmission (HT) filters
- All models meet ANSI Z136.1, ANSI Z87.1 impact and CE requirements
- Includes microfiber cleaning bag, storage case and safety hang cord



Extra Coverage, Style and Protection

The industry's first 9-base wrap-around laser eyewear encompasses the eye while the patented MMT – Multi-Material Technology™ cushions every point of contact with the worker's face for unparalleled comfort and impact resistance.

GPT XC®

- State-of-the-art molding technology combines multiple materials that produce a featherweight frame with unparalleled comfort
- Soft elastomeric browguard and flexible "fingers" cushion every point of contact with the face
- Anti-fog coating comes standard with each lens
- Adjustable temple length and inclination
- Patented dual 9 base wrap-around lens provides uninterrupted peripheral vision while offering superior coverage
- **Detachable Rx insert available upon request** with every pair of GPT XC eyewear: fits up to 6 diopters
- All models meet ANSI Z136.1, ANSI Z87.1+ high impact and CE requirements
- Includes cleaning cloth, storage case and safety hang cord



GPT LGF Series

- Fits over most prescription frames or can be worn as a spectacle
- One-piece, impact-resistant polymer lens with integral molded side-shields offers a large protective area with unrestricted wide-angle viewing
- Contoured frame conforms to the forehead providing excellent orbital coverage
- Duoflex comfort-cushion, adjustable temples
- Meets ANSI Z136.1, ANSI Z87.1 impact and CE requirements
- Includes cleaning cloth, storage case and safety hang cord



GPT LGM Series

- Designed to be worn as a spectacle
- Contemporary sports design combined with wrap-around protection
- Superior optics provides a large protective area with unrestricted wide-angle viewing
- Snug, comfortable fit
- Meets ANSI Z136.1, ANSI Z87.1 impact and CE requirements
- Includes cleaning cloth, storage case and safety hang cord



Polymer Laser Eyewear

Polymer styles are designed to maximize visibility while providing unsurpassed attenuation by narrowing the absorption band to the specific laser wavelengths.

These feather-weight, impact-resistant, polymer lenses are available for all of today's lasers, and custom designs are available upon request. Manufactured to stringent ANSI and European standards in our ISO-certified state-of-the-art facility.

GPT Encore™ Series

- Fits over prescription eyewear or can be worn as a spectacle
- Stylish, comfortable
- Adjustable and flexible temples
- Available in both Polymer and LGT™ (glass) filter options
- Meets ANSI Z136.1 and ANSI Z87.1 impact
- CE certified models available
- Includes cleaning cloth, storage case and safety hang cord



GPT Flex Seal® Goggle

- Fits comfortably over prescription eyewear
- Silicon flange for long lasting comfort and customized fit
- Replaces LPG and LGS goggles
- Meets ANSI Z136.1, ANSI Z87.1 impact and CE requirements
- Includes cleaning cloth and storage case



LGT™ Laser Eyewear

LGT (Laser Glass Technology) is designed to withstand direct laser radiation for short durations.

Absorbing glass and/or dielectrics are combined to maximize visibility, weight and protection.

The wavelength and power specific alignment filters allow the user to see the termination point of the visible laser.

GPT Encore™ Series

- Fits over prescription eyewear or can be worn as a spectacle
- Stylish, comfortable
- Adjustable and flexible temples
- Available in both LGT and Polymer filter options
- Meets ANSI Z136.1 and ANSI Z87.1 impact
- CE certified models available
- Includes cleaning cloth, storage case and safety hang cord



GPT LS5 Series

- Wrap-around spectacle design conforms closely to the face
- Features a large 66 mm curved lens
- Ratchet hinge and Duoflex™ comfort-cushion, adjustable temples
- Meets ANSI Z136.1 and ANSI Z87.1 impact
- Includes cleaning cloth, storage case and safety hang cord



GPT LS9 Series

- Designed to be worn as a spectacle
- Rx compatible
- Comfortable, lightweight design
- Side shield and eyebrow coverage
- Meets ANSI Z136.1 and ANSI Z87.1 impact
- Includes cleaning cloth, storage case and safety hang cord



GPT LS6 Goggle

- Goggle design fits comfortably over prescription eyewear
- Removable pads for personalized fit
- Anti-fog design insures cool comfortable fit
- Meets ANSI Z136.1, ANSI Z87.1 impact and CE requirements
- Includes cleaning cloth and storage case



Crystal Clarity™ Filters

GPT Encore™ Series

- Fits over prescription eyewear or can be worn as a spectacle
- Crystal Clarity filters available only in small size Encore frame
- Stylish, comfortable
- Adjustable and flexible temples
- Meets ANSI Z136.1 and ANSI Z87.1 impact
- CE certified models available
- Includes cleaning cloth, storage case and safety hang cord



GPT LS5 Series

- Wrap-around spectacle design conforms closely to the face
- Features a large 66 mm curved lens
- Ratchet hinge and Duoflex™ comfort-cushion, adjustable temples
- Meets ANSI Z136.1 and ANSI Z87 impact
- Includes cleaning cloth, storage case and safety hang cord



The lightest weight coated filter in the industry!

These dielectrically-coated filters provide protection over a 30-degree angle of incidence in accordance with domestic and international laser eyewear standards (ANSI Z136.1 and EN 207).

Unlike other coated filters, these are stable at all temperature levels and are 100% tested for optical density and pinholes. These filters are available in our over the glass (OTG) or spectacle frames featuring a large viewing area, ratcheting hinge and multiple temple adjustments. Duoflex™ comfort cushion temples soothe the sensitive mastoid area behind the ear for long lasting, all day comfort.

Polymer and LGT Windows

Polymer and LGT Windows

- 2' x 3' or 3' x 4' acrylic windows use the same dye from our polymer products
- Nd:YAG window offers the highest VLT on the market
- Available for YAG/CO₂, YAG/KTP, Argon/KTP, Excimer/CO₂
- Custom wavelengths and sizes available upon request
- May be used for laser machines or as display panels



Our key to success is enhancing visibility and protection with practical features that maximize your productivity.

Our product line of windows takes that philosophy a step further, providing practical tools to help you reach your goals – efficiency and safety.

IPL and Patient Care



Coming Soon: Light Speed™ II

- Designed based on customer requests
- A new version with increased viewing area
- Lighter weight, 21% reduction compared to LightSpeed®

Sperian is the worldwide leader in laser, IPL (Intense Pulsed Light) and Patient Eye Shields.

Our range of products for this market includes the Light Speed : a clear, electronic eyewear for intense pulse light (IPL) applications, disposable or reusable Patient Eye Shields and innovative, stylish spectacles for Laser and IPL procedures.

Manufactured in our state-of-the-art ISO certified facility, Sperian® products meet domestic and international standards.



Light Speed™

- Safety Eyewear that reacts automatically to IPL
- Light Speed filter reacts automatically to protect eyes in IPL environments
- Fits comfortably over prescription eyewear
- Works efficiently and safely in daylight conditions
- Glare reduction factor 2 to 9, with permanent UV and IR protection
- No need to flip eyewear up and down
- Minimizes headache and other adverse effects associated with IPL glare
- Meets ANSI Z136.1

GPT XC® IPL

- State-of-the-art molding technology combines multiple materials that produce a featherweight frame with unparalleled comfort
- Soft elastomer browguard and flexible “fingers” cushion every point of contact with the face
- Available in 3 different tints for bright IPL flash
- All models meet ANSI Z87.1+ high mass velocity and impact requirements
- Adjustable temple length and lens inclination
- Patented dual 9-base wrap-around lens provides uninterrupted peripheral vision while offering superior coverage



IPL-Aid™ Non-Laser Disposable Eye Shields

- For use with devices and microdermabrasion
- Allows access to nose bridge, brow and temples
- Easy to apply and comfortable to wear
- Tab for easy removal or repositioning
- Latex-free and hypoallergenic
- Designed to protect most orbital sizes



Derm-Aid™ Non-Laser Disposable Eye Shields

- For use with microdermabrasion, chemical peels and facials
- Allows access to bridge, brow and temples
- Easy to apply and comfortable to wear
- Tab for easy removal or repositioning
- Easy-peel adhesive
- Latex-free and hypoallergenic
- Designed to protect most orbital sizes



Laser-Aid™ Disposable Laser Eye Shields

- Laser-safe for medical lasers with wavelengths between 190nm-11,000nm
- Protection level: OD 7 @ 190nm-11,000nm
- EN 207: 315-1400 DIR L6, >1400-11000 D L4 + IR L3 GPT DIN CE
- Allows access to bridge, brow and temples
- Easy to apply and comfortable to wear
- Tab for easy removal or repositioning
- Latex-free and hypoallergenic
- Designed to protect most orbital sizes

IPL and Patient Care

LED-Aid™ Disposable Laser Eye Shields

- Safe for use with LEDs, low-powered lasers (<1 watt), IPL and microdermabrasion devices
- Protection level: OD 4 @ 315nm-1400nm
- EN 207: >315-1400 DIR L4 GPT DIN CE
- Allows access to bridge, brow and temples
- Easy to apply and comfortable to wear
- Tab for easy removal or repositioning
- Latex-free and hypoallergenic
- Designed to protect most orbital sizes



I-Block™ II (Improved)

- New, improved swivel adjustment
- Holds eye cups in place while allowing you to adjust eyewire for nasal area
- Increases patient comfort while providing easy access to facial area
- Ultra-light weight, laser-resistant patient shield
- Protection level: OD 7 @ 190nm-11,100nm
- Covers orbital area of the eye while allowing access to bridge, brow and temples
- Storage case and adjustable straps included



SpectraShield™

- Generally used with patients who prefer to have eyes covered during operation
- Made of lightweight alloy
- One SpectraShield protects against all lasers
- Adjustable to different pupillary distances (PD)
- Adjustable nosepiece and safety strap promote secure fit
- CE certified against direct laser radiation



SpectraView™

- Generally used with patients who prefer visibility during operation
- Can be used when operating on children
- Made of lightweight alloy
- Viewing window made of same materials as polymer or glass filters
- Adjustable to different pupillary distances (PD)
- Adjustable nosepiece and safety strap promote secure fit
- CE certified



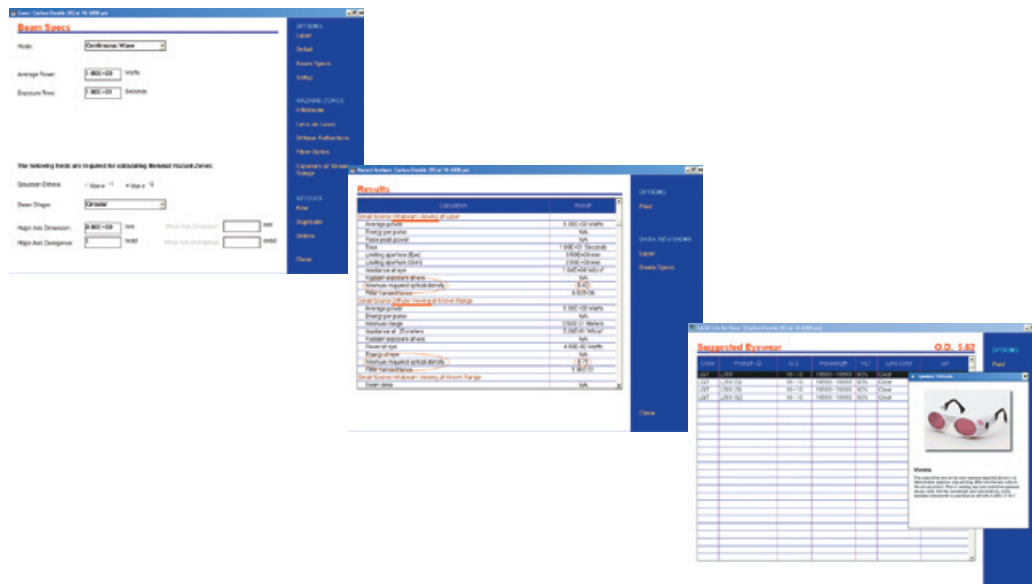
Laser Eyewear Selection Made Easy

LAZAN is a free web-based software program developed exclusively for authorized Sperian Distributors, that demystifies the laser eyewear selection process.

Visit www.glendalelaser.com and click on “OD and Eyewear Calculator” to get started.

LAZAN Software

- Step-by-step program prompts for essential parameters
- Fine tune your results based on frame style, Visible Light Transmission (VLT), filter technology and price
- Calculates required optical density (OD) or protection level
- Suggests appropriate Sperian Laser Eyewear for the application



**Serving the laser community
for 40 years.**

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