



# NORTHERN DIVER

## SPECIALIST RESCUE EQUIPMENT

- This safety footwear complies with the EC Directive for Personal Protective Equipment (Directive 89/686/EEC) and meets the requirements of the European standard EN ISO 20345:2011. It is certified by ITS Testing Services UK Ltd, Centre Court, Meridian Business Park, Leicester, LE19 1WD, Notified Body no 0362.
- Safety Footwear is manufactured using both synthetic and natural materials which conform to the relevant sections of EN ISO 20345:2011 for performance and quality.
- Safety Footwear is designed to minimise the risk of injury which could be inflicted by the wearer during use. It is designed to be used in conjunction with a safe working environment and will not completely prevent injury if an accident occurs which exceeds the testing limits of EN ISO 20345:2011
- The footwear protects the wearer's toes against risk of injury from falling objects and crushing when worn in industrial and commercial environments where potential hazards occur with the following protection plus, where applicable, additional protection.
- If your footwear is labelled with marking code "P", "S3" or "S5" on product specification label, then the following information applies:
  - The penetration resistance of this footwear has been measured in the laboratory using a truncated nail of diameter 4,5mm and a force of 1100 N. Higher forces or nails of smaller diameter will increase the risk of penetration occurring. In such circumstances alternative preventative measures should be considered
  - Two generic types of penetration resistant insert are currently available in PPE footwear. These are metal types and those from non-metal materials. Both types meet the minimum requirements for penetration resistance of the standard marked on this footwear but each has different additional advantages or disadvantages including the following:
    - Metal: Is less affected by the shape of the sharp object/hazard (ie diameter, geometry, sharpness) but due to shoemaking limitations does not cover the entire lower area of the shoe
    - Non-metal: May be lighter, more flexible and provide greater coverage area when compared with metal but the penetration resistance may vary more depending on the shape of the sharp object/hazard (ie diameter, geometry, sharpness)
  - For more information about the type of penetration resistant insert provided in your footwear please contact the supplier of this footwear

Impact protection provided is 200 Joules.  
Compression protection provided is 15,000 Newton's.

Additional protection may be provided, and is identified on the product by it marking as follows

	Marking code
Penetration resistance (1100 Newton's)	P
Electrical properties:	
Conductive (Max 100 kΩ)	C
Antistatic (Range of 100 kΩ to 1000 MΩ)	A
Electrically insulating footwear	I
Resistance to inimical environments:	
Insulation against heat	HI
Insulation against cold	CI
Energy absorption of seat region (20 Joules)	E
Water resistance	WR
Metatarsal protection	M
Ankle protection	AN
Cut resistant upper	CR
Upper	
Water penetration and water absorption	WRU
Outsole	
Resistance to hot contact	HRO
Resistance to fuel oil	FO

- It is important that the footwear selected for wear must be suitable for the protection required and wear environment. Where a wear environment is not known, it is very important that consultation is carried out between the seller and the purchaser to ensure, where possible, the correct footwear is provided.
- To ensure the best service and wear from footwear, it is important that the footwear is regularly cleaned and treated with a good proprietary cleaning product. Do not use any caustic cleaning agents. Where footwear is subjected to wet conditions, it shall, after use, be allowed to dry naturally in a cool, dry area and not be force dried as this can cause deterioration of the upper material. When stored on normal conditions (temperature, and relative humidity), the obsolescence date of a footwear is generally:
  - 10 years after the date of manufacturing for shoes with upper leather and rubber sole
  - 3 years after the date of manufacturing for shoes including PU
- This footwear has been successfully tested against EN ISO 20345:2011 clause 5.3.5 for slip resistance and the following marking symbols apply.

Marking of product for slip resistance properties	Marking code
Ceramic tile with sodium lauryl sulphate	SRA
Steel with glycerol	SRB
Ceramic tile with sodium lauryl sulphate & Steel with glycerol	SRC

\*Note: Slippage may still occur in certain environments.

- Electrically-resistant footwear is supplied with an Information Notice as required by EN ISO 20345:2011 outlining the purpose, use of footwear, requirement for regular testing when in use, to ensure footwear stays within specific resistance levels. Footwear shall be kept clean and free from contamination between the sole surface and flooring to retain satisfactory contact. The flooring shall be of an electrically-resistant level to ensure the footwear can dissipate static electricity to earth.
- If the footwear is cared for and worn in the correct working environment and stored in dry ventilated conditions, it should give a good wear life, without premature failure of the outsole, upper and upper stitching. The actual wear life for footwear is dependent on the type of footwear, environmental conditions which can affect the wear, contamination and degradation of the product.

• Marking on footwear denotes that the footwear is licensed according to the PPE Directive and is as follows:

Examples of markings	Explanation
Firm	Identification Mark
CE	CE mark
EN ISO 20345:2011	Number of European standard
9 (43)	Footwear size
05/2013	Quarter and year of manufacture
SB	Category of protection
A	Additional property code, e.g. Antistatic
GR1	Group Identification

Categories of safety footwear:

Category	Type (*I) and (**II)		Additional Requirement
SB	I	II	Safety basic requirements
S1	I		Closed seat region Antistatic properties Energy absorption at the seat region Resistance to fuel oil
S2	I		As S1 plus Water penetration and absorption of the upper
S3	I		As S2 plus Penetration resistance Cleated outsole
S4		II	Closed seat region Antistatic properties Energy absorption at the seat region Resistance to fuel oil
S5		II	As S4 plus Penetration resistance Cleated outsole
*Type I footwear is made from leather and other materials excluding all-rubber or all-polymeric footwear			
** Type II All rubber (i.e. entirely vulcanized) or all-polymeric (i.e. entirely moulded) footwear			
SBH	Hybrid footwear		

• If the footwear becomes damaged, it will not continue to give the specified level of protection and to ensure that the wearer continues to receive the maximum protection, the footwear should immediately be replaced.

• The packaging provided with the footwear at the point of sale is to ensure that the footwear is delivered to the customer in the same condition as when dispatched; the carton can also be used for storing the footwear when not in wear. When the boxed footwear is in storage, it should not have heavy objects placed on top of it, as this could cause breakdown of its packaging and possible damage to the footwear.

• The footwear is supplied with a removable insock. Please note the testing was carried out with the insock in place. The footwear shall only be used with the insock in place. The insock shall only be replaced by a comparable insock.

• If the footwear is supplied without an insock testing was carried out with no insock present. A warning shall be given that fitting an insock can affect the protective properties of the footwear.

#### Antistatic footwear

• Antistatic footwear should be used if it is necessary to minimize electrostatic build-up by dissipating electrostatic charges, thus avoiding the risk of spark ignition of, for example flammable substances and vapours, and if risk of electric shock from any electrical apparatus or live parts has not been completely eliminated. It should be noted, however, that antistatic footwear cannot guarantee an adequate protection against electric shock as it introduces only a resistance between foot and floor. If the risk of electric shock has not been completely eliminated, additional measures to avoid this risk are essential. Such measures, as well as the additional tests mentioned below should be a routine part of the accident prevention programme of the workplace.

• Experience has shown that, for antistatic purpose, the discharge path through a product should normally have an electrical resistance of less than 1000MΩ at any time throughout its useful life. A value of 100kΩ is specified as the lowest limit of resistance of a product when new, in order to ensure some limited protection against dangerous electric shock or ignition in the event of any electrical apparatus becoming defective when operating at voltages up to 250 V. However, under certain conditions, users should be aware that the footwear might give inadequate protection and additional provisions to protect the wearer should be taken at all times.

• The electrical resistance of this type of footwear can be changed significantly by flexing, contamination or moisture. This footwear will not perform its intended function if worn in wet conditions. It is, therefore, necessary to ensure that the product is capable of fulfilling its designed function of dissipating electrostatic charges and also of giving some protection during its whole life. The user is recommended to establish an in-house test for electrical resistance and use it at regular and frequent intervals.

• Classification I footwear can absorb moisture if worn for prolonged periods and in moist and wet conditions can become conductive.

• If the footwear is worn in conditions where the soling material becomes contaminated, wearers should always check the electrical properties of the footwear before entering a hazard area.

• Where antistatic footwear is in use, the resistance of the flooring should be such that it does not invalidate the protection provided by the footwear.

• In use, no insulating elements, with the exception of normal hose, should be introduced between the inner sole of the footwear and the foot of the wearer. If any insert is put between the inner sole and the foot, the combination footwear/insert should be checked for its electrical properties.