

3M Occupational Health & Environmental Safety Division
Visibility Solutions

3M Scotchlite™
Reflective Material

Take your safety personally

Make
yourself
conspicuous





3M Scotchlite™
Reflective Material

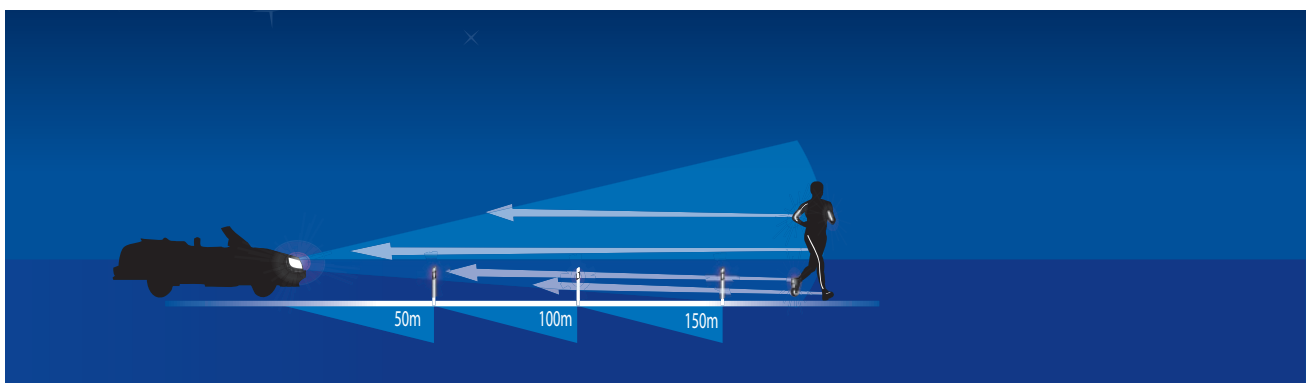
Visibility Solutions by 3M

Many aspects of daily life are impacted and benefit from the inventions and innovations of 3M employees.

We will illustrate some of the possible uses of these innovative products and how they might contribute to the increased visibility of you, your family or employees. One important product we want to focus on is 3M™ Scotchlite™ Reflective Material.

Whether at work, at play or during sporting activities, 3M™ Scotchlite™ Reflective Material helps to increase the visibility of the wearer during daytime, at night or under low light conditions such as during bad weather.

If people at work or in traffic can be seen earlier, vehicle drivers can take evasive action helping to prevent or reduce the risk of accidents.



Visibility increases safety

3M™ Scotchlite™ Reflective Material



The Evolution of Visibility



Retro-Reflective Technology

Combining versatility, functionality and fashion

3M™ Scotchlite™ Reflective Material makes use of a technology that is known as retro-reflection. The material is easy to process and there are many creative possibilities. 3M™ Scotchlite™ Reflective Material can be sewn onto garments or simply applied using a heat transfer process.

Millions of small glass spheres or micro-prisms reflect the incident light and focus it back towards the original light source. The obvious advantage is that the person in the light can be seen better and sooner thanks to the retro-reflective effect. From the car driver's view, they have extra time to react and many accidents can thus be avoided.

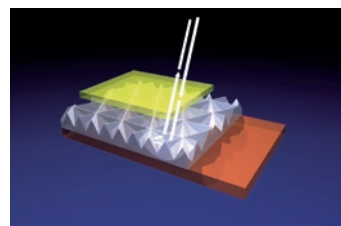
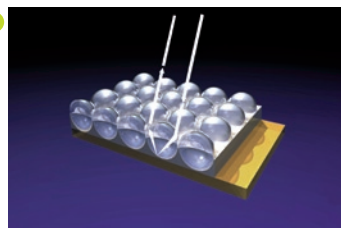
3M™ Scotchlite™ uses two different technologies in our retro-reflective range of materials.

Glass Bead/Lens Technology

3M™ Scotchlite™ Reflective Materials incorporating glass bead technology utilize millions of high performance glass beads that reflect light very effectively in all directions due to their spherical nature.

Features and Benefits:

- + Very comfortable to wear. The reflective material forms an integral part of a garment, providing freedom of movement, easy storage and folding
- + Includes a range of materials that are able to withstand high temperature washing up to 92°C
- + Can be dry cleaned and ironed
- + Cost effective
- + Available in sew-on, heat-applied and self adhesive options



Microprismatic Technology

3M™ Scotchlite™ Reflective Material High Gloss Series incorporates retro-reflective microscopic prisms formed on a polymeric film to create a bright reflective appearance on garments and accessories.

Features and Benefits

- + Is available in different colours
- + Can be washed at 60°C up to 75 times.
- + Provides an attractive, high gloss finish.
- + Can be sewn or welded onto garments.



Workwear Reflective Solutions

Visibility by day and night is an important aspect for workers who are exposed to dangers during their daily work.

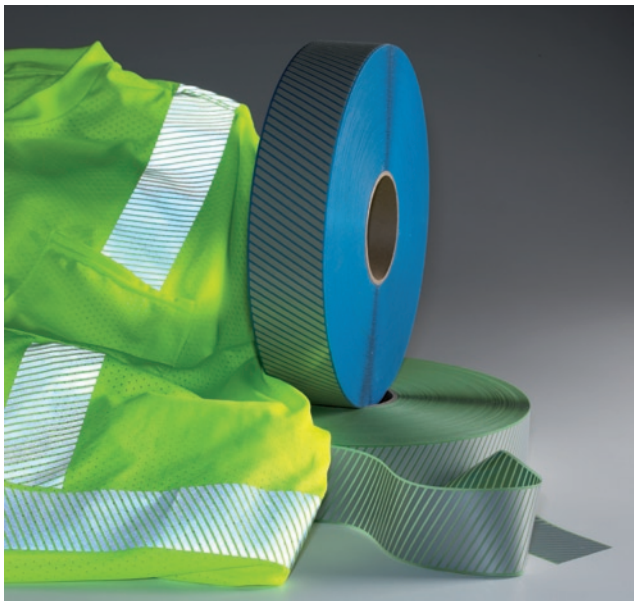
3M™ Scotchlite™ Reflective Material can be used in many different occupational fields, such as firefighting, rescue services, road construction and garbage collection. It improves visibility and safety in low light situations and at night. The superior quality and performance of 3M™ Scotchlite™ Reflective Materials ensure lasting functionality for many years; even under harsh conditions, our products will not let you down.

Applications

- + Firefighting
- + Rescue Services
- + Road Construction
- + Garbage Collection

The wide range of different 3M™ Scotchlite™ Reflective Materials is designed to provide enhanced visibility, improving the safety of the wearer, without compromising on the functionality or performance of the garment on which they are used. Since end-users increasingly

demand additional protective properties or wash durability from their high-visibility garments, such as flame resistance, industrial laundrability or chemical resistance, they can be confident that there's a 3M™ Scotchlite™ Reflective Material solution for their application.



With the introduction of 3M™ Scotchlite™ Reflective Material – Series 5500 Comfort Trim, 3M is enhancing its commitment to worker safety and comfort. The unique design of the segmented trim provides improved moisture vapour transmission, compared to solid trims, so that workers can stay dryer and cooler, while the increased flexibility makes garments more comfortable to move in.



3M™ Scotchlite™ Reflective Material



Corporate Fashion Reflective Solutions

Workwear should not only be functional, but also highly visible.

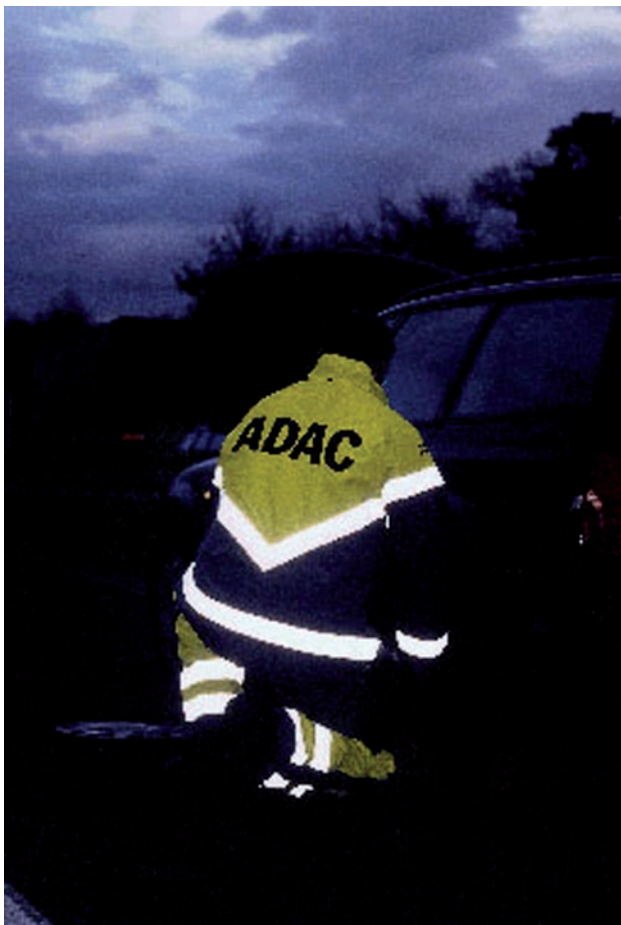
Occupational garments that have been designed to include reflective material help the wearer to be easily seen in traffic and other danger zones, as well as during normal work activities.

Features and Benefits

- + Functional
- + Highly visible
- + Necessary to be seen in traffic and other danger zones
- + Normal work activities

In an environment that is full of turmoil and reflected light, 3M™ Scotchlite™ Reflective Material incorporated into work wear and uniforms helps to make personnel more visible during day and night and in all weather conditions.

As an example, airline operations have increased dramatically in the last few decades, meaning more staff, vehicles and equipment moving around the airport and the surrounding areas, increasing the level of risk of accidents.



Airports operate 24 hours a day, 7 days a week under all weather conditions. It's a working environment that involves many hazards from moving vehicles and the risk of an accidents increases in poor light, such as at dusk or in bad weather. Airport staff working outside are not always sufficiently visible.



Fashion & Lifestyle Reflective Solutions

In road traffic, pedestrians such as schoolchildren, seniors and joggers, cyclists and horse-riders are especially vulnerable. The safety of these groups can be improved with 3M™ Scotchlite™ Reflective Material, because they can be seen better and sooner by car drivers, thus helping to prevent accidents.

Application

- + on road traffic
- + Pedestrians
- + Seniors
- + Children
- + Athletes e.g. runners
- + People on bicycles

We pay particular attention to schoolchildren who are getting their first experience in traffic. How easily they are recognized depends on good visibility. For drivers travelling at 50 km/h, improving the visibility by only 0.5 seconds, provides an additional 7 metres to stop.

3M™ Scotchlite™ Reflective Material can be easily integrated into daily fashion wear, and well-known fashion designers all over the world profit from this capability. 3M™ Scotchlite™ Reflective Material is not only highly visible, but can also be used to make fashionable, trendy design elements.



3M™ Scotchlite™ Reflective Material is not only functional, but also a key design element in outdoor fashion today.

3M™ Scotchlite™ Reflective Material

























Product Overview
























Product	Colour	Product Features
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Fabrics

8906	Silver	Fabric backing: 70% PES, 30% cotton, excellent drapability and smooth hand	 
8910	Silver	Fabric backing: 65% PES, 35% cotton, excellent drapability	       
8925	Silver	Fabric backing: 65% PES, 35% cotton, improved resistance against abrasion and chemicals, wash durability	      
8965	White	Fabric backing: 65% PES, 35% cotton, sublimation printability	    





Industrial Wash Fabrics and Transfer Films

9910	Silver	Fabric backing: 100% PES, industrial wash, tumble drying, enhanced resistance against abrasion and chemicals	      
9920	Silver	Fabric backing: 100% PES, industrial wash, tumble drying and tunnel finishing, enhanced resistance against abrasion and chemicals	      
9720	Silver	Transfer films: industrial wash, tumble drying and tunnel finishing, enhanced resistance against abrasion and chemicals	      

Flame Resistant Fabrics

8935	Silver	Fabric backing: 100% cotton, flame resistant, enhanced resistance against abrasion and chemicals	   
8940	Silver	Aramid backing, industrial wash, flame resistant, enhanced resistance against abrasion and chemicals	    
8986 NFPA	Red-orange	Fabric backing: 100% cotton, flame resistant, fluorescent-reflective	  
8987 NFPA	Lime-yellow	Fabric backing: 100% cotton, flame resistant, fluorescent-reflective	  

Fire Coat Trims

9686	Silver-red-orange	Aramid fabric, flame resistant, fluorescent red-orange, silver reflective centre stripe	 
9687	Silver-lime-yellow	Aramid fabric, flame resistant, fluorescent lime-yellow, silver reflective centre stripe	 



3M™ Scotchlite™ Reflective Material



Product	Colour	Product Features
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Transfer Films

5510	Silver	Segmented trim for occupational garments, improved moisture vapour transmission, comfort and wash performance	
8710	Silver	Heat activated adhesive, stretchable	
8711	Silver	Heat activated adhesive, elastic, can be printed directly	
8725	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability	
8725LL	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability	
8726	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability	
8726LL	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability	
8765	White	Heat activated adhesive	
8787	Lime-yellow	Heat activated adhesive, fluorescent lime-yellow combined performance material	

Marking Films

8850	Silver	Pressure sensitive adhesive (PSA), non-washable	
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High Gloss Trims

7160	White	Ready to be sewn on, can be printed	
7180	Silver-grey	Ready to be sewn on, coloured retroreflection, can be printed	
7187	Lime-yellow	Ready to be sewn on, coloured retroreflection, can be printed, fluorescent-reflective	
7196	Red-orange	Ready to be sewn on, coloured retroreflection, can be printed, fluorescent-reflective	

High Gloss Films

6260/ 6260R	White	Sewing, welding, cutting, can be printed	
6287/ 6287R	Lime-yellow	Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent-reflective	
6296/ 6296R	Red-orange	Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent-reflective	

High Gloss Sparkle Films

6560	White	Sewing, welding, cutting, can be printed, sparkling appearance	
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Service and Know-How for our customers

www.3M.EU/Safety



**3M Health & Safety
Helpline**
+44(0)870 60 800 60

Find out more and visit our Website www.3M.EU/Safety

Solutions

Have a look at 3M's product and service offerings – tailored specifically to your industry/applications. We have put together information for you that can help you with the choice of personal protective equipment products, for example, or with finding training programs.

Document Overview

To help you quickly find what you're looking for, various brochures and datasheets are available for download here.



Products

The entire range of Personal Protective Equipment (PPE) by 3M is presented in this catalogue and you also have access to our interactive product catalogue on the web.

News and Events

Keep up to date. Our website offers you interesting news on the subject of occupational safety. Find out about exhibitions where 3M is represented.



Customer Service

We will help you wherever we can – for example, if you are looking for dealers, contacts, or products.



About 3M

3M – a global, diversified technology company. Every day at 3M, people find new ways to make amazing things happen. Wherever you are, whatever you do, you know you can rely on 3M to help make your lives better. Serving customers in more than 200 countries around the world, we use our expertise, technologies and global strength to lead in major markets. For more general information about 3M, including the latest product and technology news, visit our corporate website www.3M.com



Training and Service

3M's product training is based on many years of customer research, conducted in the field of occupational health and safety. Experts from throughout the safety world are invited to our customer events to discuss topical issues regarding health and safety in the workplace. This enables us to offer comprehensive support for safety inductions and provide easy-to-use training tools. Our training is designed to meet the individual needs of your company; your safety being at the heart of everything we do.

If you are interested in training and seminars, please contact your local 3M office where we will be more than happy to assist you in your health and safety needs.



3M Takes Responsibility – for Environment, Health and Safety

One of 3M's declared goals is to develop and use safe products that have minimal impact on people, the environment and the workplace. All 3M subsidiaries and business divisions are highly committed to contribute to that goal in their daily activities. In 3M, we are strongly committed that our processes and products fulfil the regulatory requirements and we practise an open, dedicated communication policy. Wherever and whenever possible, we strive to avoid or reduce the environmental impacts and hazards to which our employees may be subjected. With our Life Cycle Management System, we analyze and optimize the possible effects of our products on the environment before they go to market, as well as throughout their entire life cycle. A priority in production is to use natural resources as sparingly as possible.





Division Name
3M Operating Unit
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Country
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Website address

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