



See clearly, longer

How Scotchgard™ Anti-Fog
Coating can improve worker
health and safety

Workplace eye injuries can affect Canadian workers of all ages in nearly every industry.

In Canada, 200 work-related eye injuries occur each day.² These types of injuries can cause temporary or permanent vision loss and result in lost days at work, with 5% of eye injuries interfering with work on a short or long-term basis. In Ontario alone, there were 1,124 lost time claims in 2015 due to eye-related workplace incidents.¹

Eye-related workplace injuries often occur when a worker isn't wearing their safety glasses properly or when they aren't worn at all. Fogged eyewear is considered one of the most significant factors in noncompliance among workers and is a large contributor to these numbers.³ When safety glasses fog, workers are more likely to remove them, putting themselves at a higher risk for injury.



**What's most shocking is that 90% of these
injuries could have been prevented with
the right type of eye protection.²**

200 
**eye injuries occur every day
in Canadian workplaces.***



*Source: CNIB, www.cnib.ca

When fogging occurs

Fogged eyewear is a concern throughout the year. It is especially prevalent when there are significant changes in temperature in the work environment and when high heat and high humidity are combined. It is also a common issue for workers like welders who wear faceshields while working, which reduces air flow around the head. Fogged eyewear can also be the result of something as simple as an oil and gas worker finishing their break indoors and stepping outdoors into sub-zero temperatures in the winter.

Eye injuries can occur in hot and steamy environments when workers remove safety glasses in order to see better – exposing themselves to workplace hazards. Injuries can also occur when eyewear is fogged and the worker doesn't remove their glasses, leaving them with impaired vision that can make handling everyday tasks tough. This is especially common in oil and gas industries, the food manufacturing industry, utilities, paper mills, metal fabrication and more.



Compliance

Eye protection is a legislated requirement in all jurisdictions across Canada if there is a risk of injury or irritation to the eyes. A hazard assessment should be conducted at each work site to determine the type of protection required based on the hazards that are present. The workplace health and safety manager will be able to make a recommendation about whether or not safety eyewear with anti-fog coating will be beneficial to workers in a given location.

Why workers rely on anti-fog coating

The benefits of anti-fog coating on safety glasses are significant:

- ▶ Safety – workers are able to wear the eyewear in the correct position in hazardous areas, resulting in fewer workplace eye injuries
- ▶ Productivity – when workers don't have to remove glasses to clean them or constantly adjust them for better vision, less time is lost during a shift
- ▶ Distortion-free vision – workers are better equipped to perform precise tasks with fewer mistakes
- ▶ Financial – fewer workplace eye injuries can result in fewer fines, WSIB claims and lost production time; having a good safety record can also help improve a company's reputation



Safety



Productivity



Distortion-Free Vision



Financial

A unique anti-fog coating

Unlike many anti-fog coatings, 3M™ Scotchgard™ Anti-Fog Coating is directly bonded into the lens of the safety glasses and not just to the surface. The coating retains its effectiveness for at least 25 washings, allowing workers to wear their eyewear longer.*

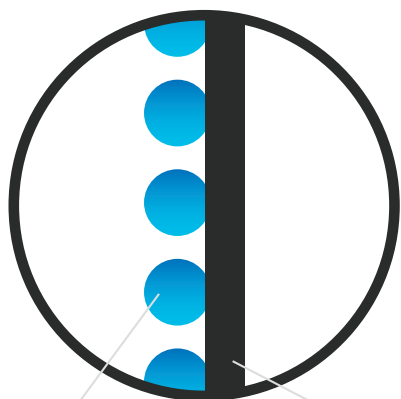
The Scotchgard™ Anti-Fog Coating is a hydrophilic anti-fog coating. The hydrophilic coating reduces the surface tension on the lens, allowing the water that has been created by condensation to create a continuous film on the lens. This is in contrast to other types of anti-fog

coatings where droplets of water form on the lens, reducing workers' visibility. The reduced-contact angle flattens the water beads into a thin, transparent film of water and allows light to pass through with minimal distortion.

It is important to note that even if a worker is wearing safety glasses with a vented gasket, the Scotchgard™ Anti-Fog Coating will still work. This is important for workers who need protection from particulate in the air in the environment they are working in.



UNCOATED



CONDENSATION

LENS

SCOTCHGARD™ ANTI-FOG COATING



CONDENSATION

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ANTI-FOG
COATING

LENS

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How to clean safety glasses with 3M™ Scotchgard™ Anti-Fog Coating

One of the biggest benefits of the Scotchgard™ Anti-Fog Coating is how long it lasts. The coating retains its effectiveness for at least twenty five washings, allowing workers to wear their eyewear longer than eyewear with traditional anti-fog coatings.* In order to prolong the effects of the anti-fog coating, it's important to clean your safety glasses properly.

The best way to wash safety glasses with Scotchgard™ Anti-Fog Coating is with soap and water and allowing them to air dry or by wiping with a soft cloth.* The eyewear can also be disinfected by soaking the lens in a solution of diluted bleach and water.

3M™ Super-Clear Protective Eyewear Lens Cleaning Towelettes 83745-00000 are another convenient option for cleaning lenses while preserving the anti-fog coating.

It is not recommended to use anti-fog cleaning wipes to clean safety glasses that are bonded with Scotchgard™ Anti-Fog Coating. These types of wipes can actually negatively affect the performance of anti-fogging properties.



*Based on 3M internal testing per EN168 test method when compared with traditional anti-fog coatings.

¹Workplace Safety and Insurance Board, "Allowed Lost Time Claims by Part of Body," March 31, 2017.

²CNIB, "Eye Safety at Work", <http://www.cnib.ca/en/your-eyes/safety/at-work/Pages/overview.aspx>.

³Rex Talbot, "Clear the Fog to Decrease Eye Injuries", Occupational Health & Safety, August 1, 2015.