

# Lens fogging is the number one challenge facing wearers of safety eyewear on the job.\*

Lenses fog in almost every application: going from cool to warm air or from outdoor to indoor environments; in high humidity; and during strenuous work causing perspiration. Even just someone's warm breath in a cool room or the heat rising from a motor can cause lenses to fog.

Fog means double trouble. One, fog reduces visibility. That's a hazard in itself. Two, fogged-up lenses make workers want to remove their safety glasses to wipe away the fog or to get a momentary clear view. That's a hazard waiting to become an accident.

No eye protection equals "out of compliance" — and, most importantly, in those vulnerable seconds or minutes their eyes are exposed to potential impact or splash hazards, eye injuries can occur.

\*Accident Analysis & Prevention magazine, 2009





# **FOG**

When warm, moist air comes in contact with a cooler surface, the water held in the air as vapor condenses into tiny water drops as it cools against the surface. This is the "fog" that clouds your lenses and obscures your vision. The fog will eventually disappear as the lenses warm up or adjust to the ambient temperature. But before the fog clears, there may be seconds or minutes when workers are totally "in the dark."

# **ANTI-FOG**

Our team of scientists created a proprietary anti-fog lens coating using a groundbreaking technology that delivers better, longer-lasting fog-free protection than that of competitive anti-fog-coated products.

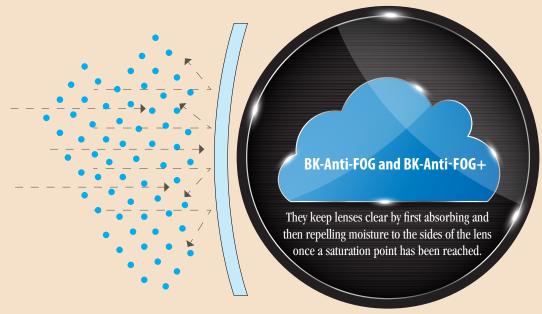
Our BK-Anti-FOG and BK-Anti-FOG+ coatings provide extreme anti-fog performance and improve both worker safety and productivity.





# How does BK-Anti-FOG work?

Fog is 1000s of tiny water bubbles formed when air moisture condenses on the lens. Our BK-Anti-FOG coating prevents bubbles from forming. BK-Anti-FOG is bonded directly onto the lens surface, so they retain the hydrophilic properties for a longer duration—no reapplying and no maintenance needed.











## WHY DO MY SAFETY GLASSES FOG?

# Aren't they required to have anti-fog protection?



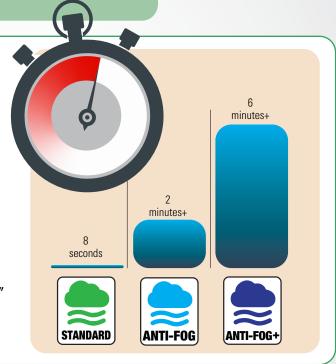


There is no anti-fog standard in the U.S.—ANSI or any other—for protective eyewear. If you have experienced poor anti-fog performance on safety glasses, it is likely they were manufactured without adherence to a standard of any kind.

We decided it was important to measure our safety products by a standard—so we went to EN 166/168, the most stringent anti-fog standard in the world. Then we went beyond it. Voluntarily.

#### IT'S ABOUT TIME. LITERALLY.

Anti-fog coatings were created to keep the lens clear from the moment when fog would normally form to the moment when the lens would adjust to the temperature change. But not all anti-fog coatings are created equal. Depending on the temperature differential, it may require two seconds of fog protection before a lens adapts or takes on the temperature of the environment. Extreme conditions of heat and humidity can lengthen the time to unfog. This means wearers will need more robust fog protection—or else they'll be "working blind" and removing their eyewear. A compliance killer!



#### **Brass Knuckle BK-Anti-FOG**

Exceeds the EN 166/168 standard for anti-fog. Our original, proprietary anti-fog coating offers excellent performance and a long-lasting, fog-free view under even the most demanding hot and humid conditions. Washable and durable, BK-Anti-FOG performance lasts much longer than competitors' anti-fog treatments.

#### Brass Knuckle BK-Anti-FOG+

Our proprietary premium anti-fog coating delivers anti-fog protection that exceeds the EN standard by 4400 percent — or 44x the best standard in the world! Where competitive anti-fog coatings protect against fogging for two minutes, our best-in-class BK-Anti-FOG+ protection lasts more than six minutes when tested under the EN standard. In the world of eye protection, this is as good as anti-fog protection gets.









### **HOW TO CHOOSE THE RIGHT ANTI-FOG PROTECTION**

	Type of Anti-Fog Protection	Meets Standard	Anti-Fog Performance/ Duration	Benefits
ANTI-FOG+	Brass Knuckle* BK-Anti-F0G+ (Best-in-Class Anti-Fog)	EN 166/168, requires 8 seconds	6 minutes+ Exceeds EN standard	Permanently bonded to the lens; will not wear off or wash off.
				Tested under the most stringent anti-fog standard in the world, the European EN 166/168, and EXCEEDS the standard. BK-Anti-FOG+'s anti-fog properties last 45X longer than required minimums — rendering this eyewear virtually fog free.
				Retains its anti-scratch, anti-static and UV protection properties.
ANTI-FOG  STANDARD	Brass Knuckle* BK-Anti-FOG (Excellent Anti-Fog)	EN 166/168, requires 8 seconds	2 minutes+ Exceeds EN standard	Permanently bonded to the lens; will not wear off or wash off.
				Anti-fog protection exceeds European EN 166/168 — lasts 15 times longer!
				Retains its anti-scratch, anti-static and UV protection properties.
	Brass Knuckle® Standard Anti-Fog	EN 166/168, requires 8 seconds	8 seconds	Proprietary formula but not related to the BK-Anti-FOG formula.
				Limited anti-fog protection for occasional need.

# Brass Knuckle® BK-Anti-FOG & BK-Anti-FOG+ Spectacles

		Temple		
Part Number	Brand	Characteristic	Anti-Fog	
BK*1X-3100NP	Snap	Fixed Temple	BK-Anti-FOG+	
BK 11X-3060NP	Raider	Fixed Temple	BK-Anti-FOG+	
BK LEX-4040N	Spectrum	Fixed Temple	BK-Anti-FOG	
BKOST-1020NP	Crusher	Dust goggle; removable gasket converts to standard spectacle .	BK-Anti-FOG+	
BKDST-1040NP	Transformer	Dust goggle Switch from strap to temple.	BK-Anti-FOG+	
BKDST-1010N	Grasshopper	Dust goggle; removable gasket	BK-Anti-FOG	
BKDST-1010PN	Pink Grasshopper	converts to standard spectacle.		
BK0TG-9010	Smalls	OTG Spectacle	BK-Anti-FOG	

## Brass Knuckle® BK-Anti-FOG Goggles







