



LUMINARY CHEMICAL

# LUMICHEM AM

## Technical Data Sheet



Antimicrobial nanotechnology-based surface coating.  
Engineered for all surfaces.

English

# DESCRIPTION

LumiChem AM is a water based, environmentally safe, single component, invisible coating that forms a long lasting and hygienic barrier on conventional surfaces with a safe, flexible quartz glass layer. The treated surface becomes resistant to bacteria growth and spread. Additionally, surfaces become slightly more hydrophobic, contributing to the easy removal of dirt, stains, and residual staining.

LumiChem AM supplements disinfection regimes by acting as a semi-permanent microbe shield. The treated surface kills 99.99% of bacteria and most viruses for up to 12 months. Re-application of Universal AM is suggested every 1 to 3 months to maximize performance against pathogens.

## Surfaces Suitable for Application

Surfaces including metals, stainless steel, plastic, laminates, composites, flooring, textiles (Bed, curtains, bedding, mattresses, towels, etc.), countertops, wood surfaces, stone surfaces, walls, door knobs, all high-touch surfaces.

## Additional Information

Surface must be dry and free of all soil, dirt, oils, and sealers. Test surface in an inconspicuous area before application.

Application may be done by use of spray equipment, pump or hand sprayer, immersion, padding, or by roller. For smaller volumes, spray LumiChem AM onto substrate and ensure product is wiped onto all designated areas.

If product pools, spread the excess evenly until all is absorbed. Surface may be buffed in a circular motion to remove any streaking. If streaking persists, dampen cloth slightly with product and buff in circular motion.

Textiles must be washed to remove any dirt, additives, or washing agents prior to application. Apply at temperatures of 5°C/41°F – 25°C/86°F.



### NOTE

PROTECT-AM is a water-based formulation. Always ensure that the surface is safe for brief contact with water before application.

# DIRECTIONS FOR USE

Surface must be dry and free of all soil, dirt, oils and sealants. Application may be done by use of spray equipment, pump or hand sprayer, immersion, padding, or by roller. For smaller areas, spray LumiChem AM onto the surface and ensure the product is wiped onto all designated areas.



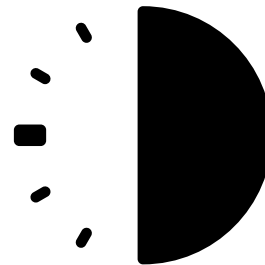
## Step 1

Clean surface to be treated, ensuring a dry finish.



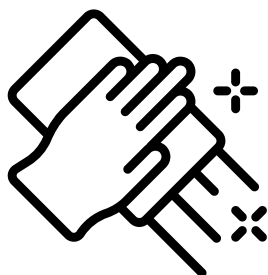
## Step 2

Apply LumiChem AM using the preferred application hardware.



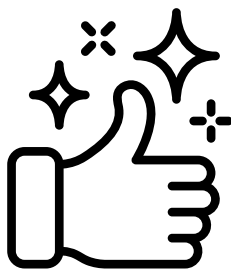
## Step 3

Allow LumiChem AM to coat the entire surface and sit for at least 30 seconds.



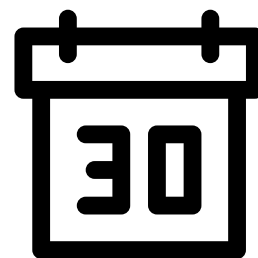
## Step 4

Wipe surface dry with a cloth. Surface may be buffed to remove streaking.



## Step 5

Coating is stabilized, and may be used immediately. Ambient cure of 6 hours recommended.



## Step 6

Remember to re-apply LumiChem AM every 30 days for optimal performance.

# SPECIFICATIONS

<b>Curing Time</b>	LumiChem AM stabilizes in minutes after application and may experience light use. 12 hours is ideal for full cure at ambient room temperature.
<b>Coverage</b>	Coverage LumiChem AM depends on the surface absorbency and varies from 50-100 ml/m <sup>2</sup> .
<b>Maintenance</b>	Treated surface may be cleaned as normal. Mild cleaners and less-frequent cleaning is acceptable.
<b>Features</b>	Invisible, food safe & skin friendly, easy cleaning, long lasting & durable, unaltered surface breath-ability, short drying period, environmentally friendly, flexible, soil and dirt rejecting, hydrophobic, oleophobic, inert.
<b>Resistant To</b>	Water, humidity and oil, soil & stains, bacteria & other microbes, mold & algae, ultraviolet (UV) rays, acid and alkaline, abrasion, hydrolysis, high temperatures.
<b>Ingredients</b>	Proprietary SiO <sub>2</sub> formulation dissolved in water.
<b>Precaution</b>	The use of latex gloves is recommended as the product may dry skin.
<b>Handling</b>	Refer to MSDS Sheet.
<b>Containers</b>	Size of containers on demand
<b>Shelf Life</b>	1 year for an unopened original container. Opened product should be used as soon as possible. Keep in a cool, dry place.

# SAFETY WARNING

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## Handling and Storage

- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Exposure Controls / Personal Protection

- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection is not required under normal conditions of use.



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