

## Information of luminaire maintenance and cleaning according to the EU (Commission Regulation) EC 245/2009, amending EC 247/2010 of 21 April 2010.

### Maintenance

For efficient operation of luminaires should normally be cleaned on a regular base with replace of the lamps. Reflectors/ diffusers should be cleaned to ensure a good result. Lamps should be replaced after the reached the end of the lifetime. In compliance with the installation instructions all parts need to be cleaned. For details of the material see product information on the website.

### Cleaning

Always switch of the luminaire before cleaning. Make sure lamps and luminaire has been cool down before cleaning or replacing. Also electrical components and cabling must not in any contact with cleaning agent or water. For cleaning of replacing use gloves. It is recommended to use clean cotton gloves. This all to avoid any fingerprints. Before cleaning rinse off with clear lukewarm water use a soft cloth or sponge without microfiber. This may cause any scratches. Change often the water and cloths.

Always take care of the used materials. Every material and environment has its own cleaning procedure. See schedule.

Environment	Cleaning recommendation	Application
Very clean	1 year	clean rooms, assembly for electronic components, hospitals, pharmaceuticals
Clean	2 years	offices, education, sport
Normally	3 years	restaurants, shops, corridor, warehouse
Dirty	4 years	metal industry, chemical industry, steel mill

Bodies	Cleaning advices normally	Cleaning advices very dirty	Drying advice
Steel	wipe with soft cloth/brush use neutral dish detergent do not use cleaning additives	use neutral dish detergent in luke warm water clean with damp cleaning cloth dipped in water	Wipe with a dry soft and clean cotton cloth without micro fiber
Aluminium	wipe with soft cloth use neutral dish detergent in lukewarm water do not use any cleaning additives	use neutral dish detergent in luke warm water clean with damp cleaning cloth dipped in water	Wipe with a dry soft and clean cotton cloth without micro fiber  Let it dry by itself, at room temperature
PMMA	Wipe with soft cloth/ brush Blow dust away with compressed air use neutral dish detergent in luke warm water clean with damp cleaning cloth dipped in water no circular wipping !	use neutral dish detergent in luke warm water no circular wipping! clean with damp cleaning cloth dipped in water	Wipe with a dry soft and clean cotton cloth without micro fiber  Let it dry by itself
Polycarbonate	Wipe with soft cloth/ brush Blow dust away with compressed air use neutral dish detergent in luke warm water clean with damp cleaning cloth dipped in water no circular wipping !	use neutral dish detergent in luke warm water clean with damp cleaning cloth dipped in water no circular wipping!	Wipe with a dry soft and clean cotton cloth without micro fiber  Let it dry by itself

Reflectors/ covers	Cleaning advices normally	Cleaning advices very dirty	Drying advice
Tempered / hardened glass	Wipe with soft clean cotton cloth use neutral dish detergent in warm water	use neutral dish detergent in warm water clean with damp cleaning cloth dipped in water	Wipe with a dry soft and clean cotton cloth without micro fiber
Aluminium	blow dust away with compressed air rinse carefully with lukewarm water before cleaning use neutral dish detergent with PH7 in lukewarm water clean gently and with a soft clean cotton cloth without micro fiber and plenty of water Change water often	rinse carefully with lukewarm water before cleaning use neutral dish detergent in warm water (max. 50°C). clean gently and with a soft clean cotton cloth without micro fiber and plenty of water Change water often	Dry with compressed air Wipe with a dry soft and clean cotton cloth with a gentle touch Let it dry by itselfs, at room temperature
PMMA	wipe with soft cloth/brush blow dust away with compressed air use neutral dish detergent in lukewarm water clean with damp cleaning cloth	Use dish detergent in lukewarm water clean with damp cleaning cloth dipped in water	Wipe with a dry soft and clean cotton cloth without micro fiber  Let it dry by itselfs, at room temperature
Polycarbonate	wipe with soft cloth/brush blow dust away with compressed air use neutral dish detergent in lukewarm water clean with damp cleaning cloth	Use dish detergent in lukewarm water clean with damp cleaning cloth dipped in water	Dry with compressed air Wipe with a dry soft and clean cotton cloth without micro fiber  Let it dry by itselfs, at room temperature

If necessary water can be mixed with non-chlorine cleaning.

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