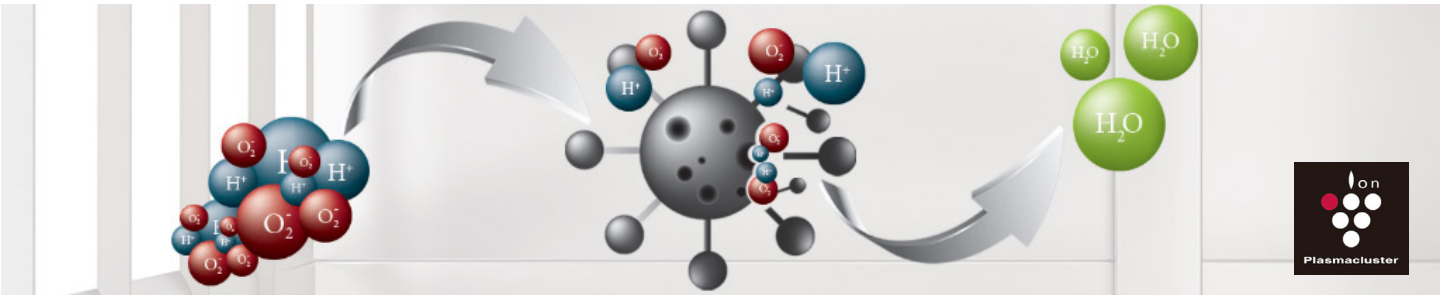

Fujitec IONFUL®

Improve the Air You Breathe

Cab interiors harbor viruses, allergens, bacteria and mold. Fujitec's IONFUL® from Sharp Corporation, combats these issues with Plasmacluster™ technology which splits water molecules into charged ions to cleanse the air. Engineered for elevator interiors, IONFUL® circulates ions through the cab where they attach, surround and break down airborne particles to release purified water vapor as a byproduct.

What are Plasmacluster Ions?

Ionized collection of atoms and molecules. They are created by H2O molecules that surround (H+) and (O_2).

What creates Plasmacluster Ions?

Sharp's Ion Generator is a device that applies positive and negative voltages to a polar zone. Water and oxygen molecules in the air are ionized with plasma to generate positive hydrogen (H+) ions and negative oxygen ions (O_2). When water molecules surround each of these positive hydrogen (H+) ions and negative oxygen (O_2) ions, Plasmacluster ions are generated.

How many Ions are generated by IONFUL®?

Anywhere from 18,000 to 45,000 n/cm3. *(Measuring instrument: ITC-201 A made by Andes Electric Co., Ltd.)*

What substances do Plasmacluster ions inactivate?

Airborne viruses, airborne bacteria, airborne allergens, airborne molds, airborne germs. (*Please refer to the table on the following page for research information on Plasmacluster technology.)*

What evidence acknowledges "World's First?"

Sharp was the first to discover that Plasmacluster ions of H+ and O2- surrounded with water molecules, killed viruses and fungi (molds) in the air. Sharp was recognized by numerous academic societies and received the "Takagi Award" for intelligent material. Sharp's ability to inactivate airborne viruses was then recognized as an unprecedented "World's First" achievement.

Plasmacluster™ Successful Inactivation Research

Substance	Species	Testing	Date
Viruses	H1N1 human influenza virus	Kitasato Institute Medical Center Hospital, Japan	February 2004
	H5N1 avian influenza virus	Retroscreen Virology, Ltd., London, UK	May 2005 • August 2008
	SARS virus *(Corona family)*	Retroscreen Virology, Ltd., London, UK	October 2005
	Coxsackie virus	Kitasato Research Center of Environmental Sciences, Japan	September 2002
	Polio virus	Kitasato Research Center of Environmental Sciences, Japan	September 2002
	Feline Corona virus *(NOTE: Sharp is considering COVID-19 testing)*	Kitasato Institute Medical Center Hospital, Japan	July 2004
	New-type H1N1 influenza virus	Retroscreen Virology, Ltd., London, UK	November 2009
Bacteria	Coliform bacteria (E.coli)	Ishikawa Health Service Assoc., Japan	September 2000
	MRSA *(methicillin-resistant Staphylococcus aureus)*	Kitasato Institute Medical Center Hospital, Japan	February 2004
	Enterococcus, Staphylococcus, Sarcina, Micrococcus	Aachen University of Applied Sciences, Germany	November 2004
Allergens	Mite allergens, pollen	Graduate School of Advanced Sciences of Matter, Hiroshima University, Japan	September 2003
Mold/Fungi	Aspergillus, Penicillium *(two species)*, Stachybotrys, Alternaria, Mucorales	Aachen University of Applied Sciences, Germany	November 2004

Note: *The table above was compiled from Sharp Corporation's release on November 2, 2009 entitled: "**For First Time Ever*1, Plasmacluster*2 Ions Shown to Inhibit Infectivity of New-Type H1N1 Influenza Virus in Both Stationary and Airborne Form; Verified in Collaboration with Retroscreen Virology Ltd.*3 of the UK"*** https://global.sharp/pci/en/certified/pdf/viruses_02.pdf. ***Efficacy in inhibiting activity of the airborne target substances noted above was verified by exposing the substances to an ion concentration of at least 3,000 ions/cm3.***