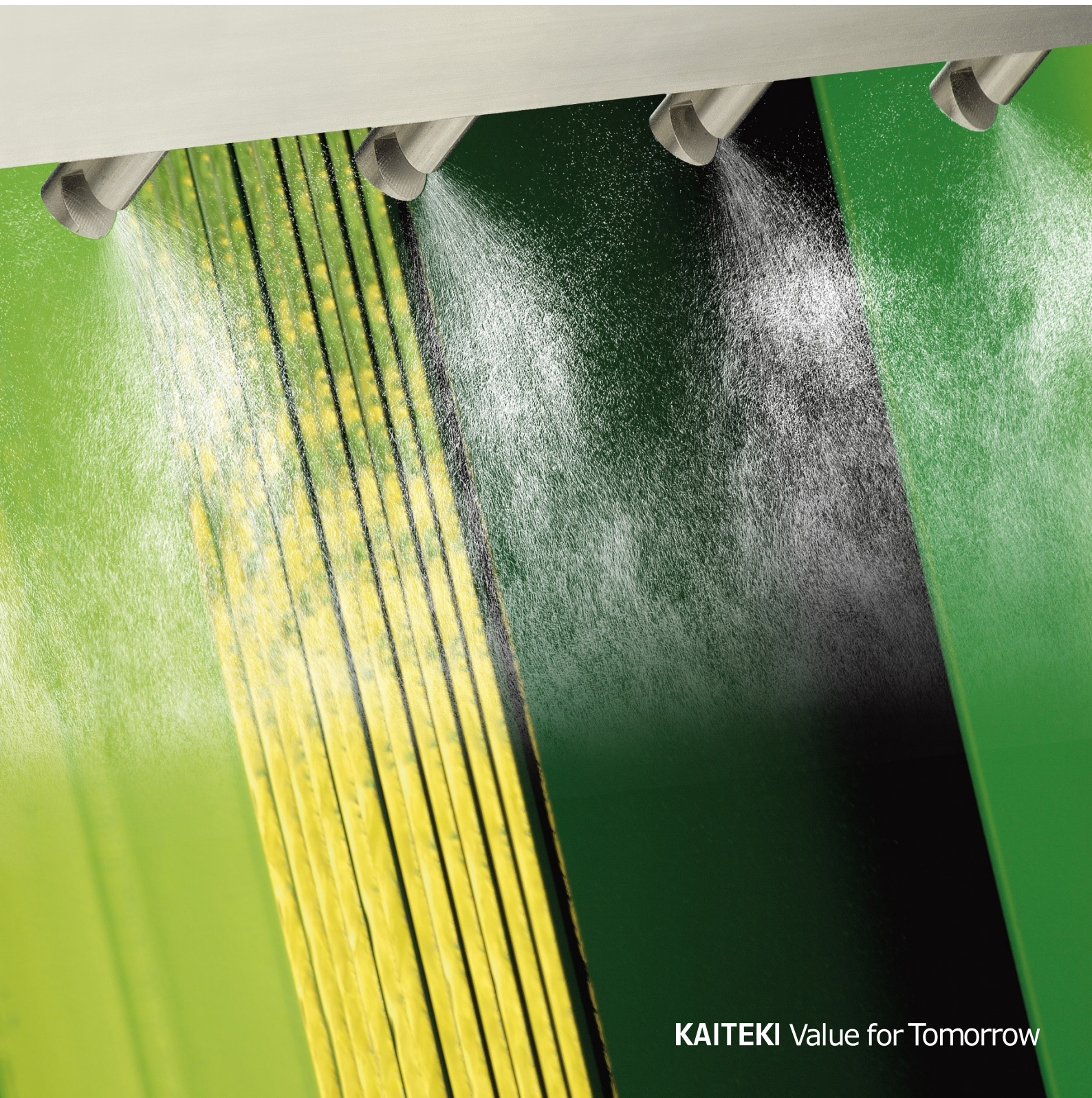
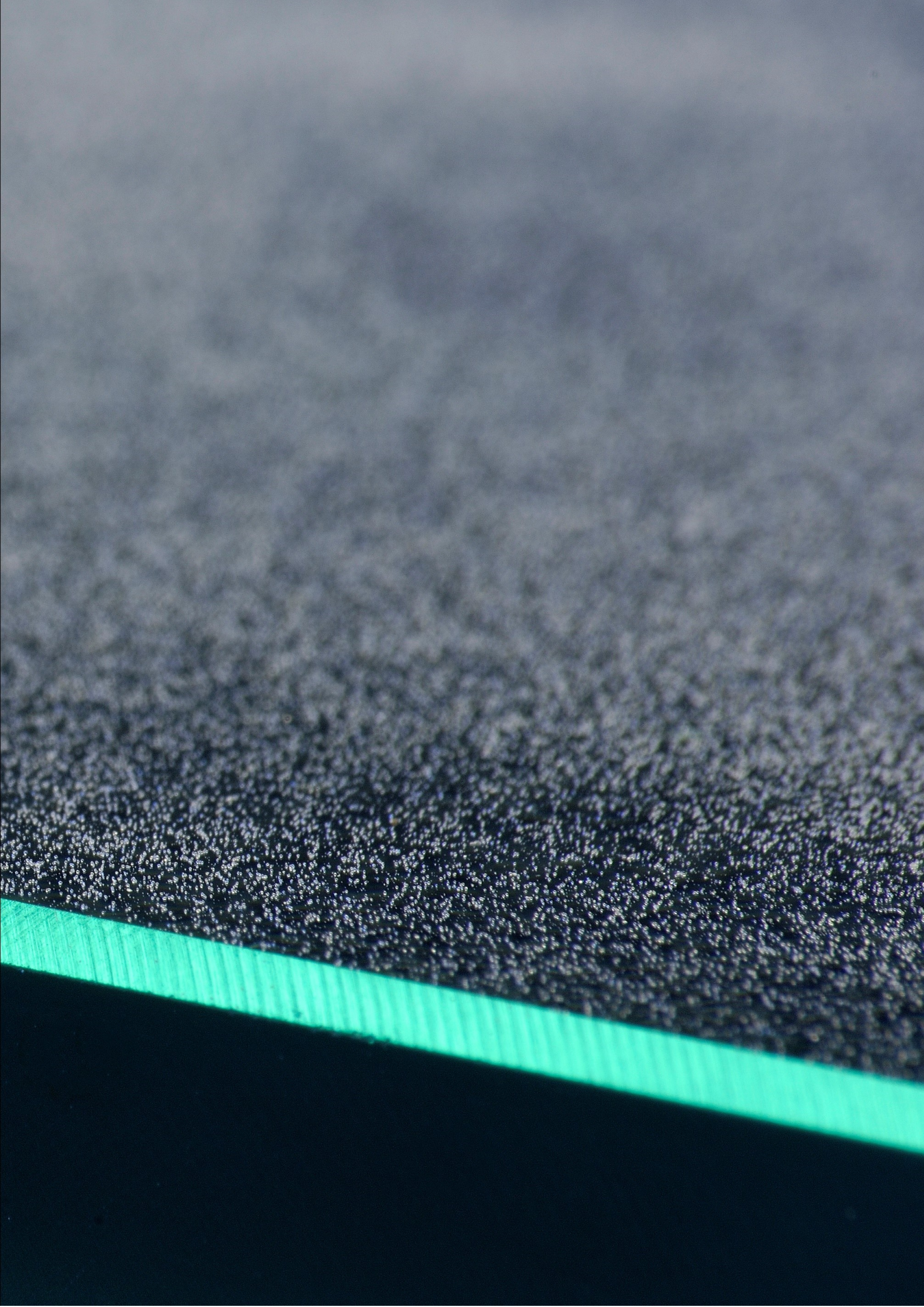


Colacryl[®] and Lucite[®] Powder Resins for Glass Interleaving





Brands with a strong heritage and a proven track record

Surface degradation of stacked sheets of glass can occur during storage in humid environments. For this reason, it is standard practice in the glass industry to employ interleavants. The primary function of interleavants is to separate the stacked glass sheets in order to prevent glass-to-glass contact and thus eliminate adhesion. A second important function is to inhibit corrosion by alkalis; this has led to the introduction of acid-modified interleaving powders.

We offer a wide range of powder interleavants that are recognized world-wide for their ability to perform effectively and efficiently. Our extensive product range covers float, speciality coated and laminated glass and has been created using our extensive experience to provide the best choice and quality to our customers.

By building direct relationships with glass producers we have been able to develop a wide range of high-performance products which continues to grow.

With a history of supplying high quality, cost effective interleavants to the world's float glass manufacturers for over forty years, our brands, Colacryl® and Lucite®, are recognized globally for their outstanding performance and dependability. There are several key factors contributing to our success:

- **Reliable supply from an integrated production process** - our acrylic polymers are supplied to each region of the world, and our vertically integrated manufacturing chain assures security of supply.
- **High quality products** - because we manage the entire manufacturing process we are able to tightly control the characteristics of our products, such as particle size.
- **Broad range of products** - we offer a comprehensive range of acrylic products for float and speciality glass. Our interleavants have been developed by working with major glass producers over many decades.
- **Flexible approach** - our experienced technical team enables us to offer a customized service, allowing products to be tailored to specific customer needs.

Why choose acrylic powder?

The use of acrylic (commonly known as PMMA) interleavants is a proven, cost effective way of protecting glass during storage and transport. A PMMA system has significant benefits over other types of interleavants:

- It is the only system where particle size is controlled. This reduces the number of pressure points on the glass and therefore reduces losses due to breakage.
- It is a clean interleavant (unlike organic flours, which can leave residues on the glass).
- Prevention of surface-to-surface abrasion in transit is superior to organic flours.
- Easily accepts electrostatic charge to minimize powder fall-off when stacked vertically (unlike other interleavants such as polyethylene).
- Easy to wash off prior to downstream processing (unlike polyethylene, which is hydrophobic and is preferentially attracted to glass in water).
- PMMA is denser than water and therefore sinks in plant washing systems (unlike polyethylene). This allows the PMMA waste to be easily collected and avoids the formation of scum.
- Order of magnitude cheaper than paper, with less waste to dispose of.
- Can easily be modified with acid to reduce alkalinity and subsequent staining.
- Unlike paper, PMMA does not contain process chemical residues (which may cause damage to glass surfaces).

Why have acid modification?

Sodium ions on the surface of the glass can react with hydroxyl ions from water in the air, causing an increase in alkalinity as sodium hydroxide is formed at the surface of the glass. If this continues for sufficient time the pH level will increase and the alkaline environment will start to attack the surface of the glass.

Acid-modified interleavants can help to prevent pitting and permanent staining (hazy or iridescent) on glass sheets. This is particularly useful in more humid atmospheres where interleavants need to be capable of resisting the increases in pH.

We have developed a broad range of adipic acid-modified interleaving powders to modify pH on the surface of the glass, with a selection of adipic acid content and particle sizes (for use in different environments).



Application	Recommended Products	Mean Diameter	Adipic Acid Content	Features and Benefits
Unmodified acrylic polymer for float glass interleaving	Lucite® 4Fi	55-66µ	0%	Controlled particle size and flow characteristics
	Colacryl® TS1588	80-105µ		
	Lucite® 47Gi	130-160µ		
Adipic acid-modified acrylic polymer for float glass interleaving	Colacryl® PBM	55-66µ	10%	Range of particle sizes and acid content to suit different climatic conditions
	Colacryl® TS2060		30%	
	Colacryl® TS1693		50%	
	Colacryl® TS2110	80-105µ	15%	
	Colacryl® TS1874		20%	
	Colacryl® TS1897		50%	
	Colacryl® TS2143	130-160µ	50%	
Hard-coated glass (e.g. solar)	Lucite® 1192	75-100µ	0%	Ultra-high molecular weight PMMA
Soft-coated glass (e.g. digital)	Colacryl® TS2050	50-60µ		Very tight particle size distribution to reduce damage to coating
Mirrored glass	Colacryl® DA100P	55-66µ		
Laminated glass	Colacryl® P2608	85-125µ		Cross-linked polystyrene grade giving thermal stability

Sales Contact

David Tindale

☎ +44 (0)7892 704950

✉ david.tindale@m-chem.com

Mitsubishi Chemical Corporation
www.m-chemical.co.jp

KAITEKI Value for Tomorrow
Mitsubishi Chemical Holdings Group

For more information please contact:

Mitsubishi Chemical UK Ltd. | Specialty Polymers and Resins | Horndale Avenue, Newton Aycliffe, DL5 6YE, United Kingdom
Phone +44 (0)1325 300990 | eu.mitsubishi-chemical.com/spr

© Copyright 2022. All rights reserved for Mitsubishi Chemical.

Information contained in this publication (and otherwise supplied to users) is based on our general experience and is given in good faith, but we are unable to guarantee its accuracy or to accept responsibility in respect of factors outside our knowledge or control. Properties as indicated are for information only and are not to be taken as guarantee of product specification. Freedom under patent, copyright and registered designs cannot be assumed. Users of these products should consult the relevant Safety Data Sheet. Colacryl® and Lucite® are registered trademarks of Mitsubishi Chemical America Inc., and Mitsubishi Chemical UK Limited. Images courtesy of IfG Ingenieurbüro für Glastechnik (www.ifg-glass.com). Additional images: Adobe Stock. Used under licence.