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Technical Data Sheet
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BL-55 Interleaving Powder for the Flat Glass Industry

SaberPack Interleaving Powder is used in the flat glass industry to provide separation between individual sheets of glass (lites) after they are packaged.

Interleaving Powder must provide adequate separation to ensure that the glass surfaces will not be damaged due to glass on glass contact or damaged due to abrasion caused by other forms of contamination between the lites. Ideally, interleaving powder will also prevent the glass from developing surface corrosion damage, commonly referred to as "stain". Interleaving powder must be easily removed from the lites after extended periods of transportation and/or storage.

BL-55 Product Description and Application Considerations

SaberPack BL-55 is a blend (by weight) of 50% boric acid and 50% acrylic (PMMA) beads. The acrylic beads provide separation of the lites and the boric acid provides protection from surface corrosion. Particle size distribution is as follows (using ASTM D 1921, Test Method A):
30 & 60 Mesh, combined = 1/2% Maximum
80, 100 & 140 Mesh, combined = 74% Minimum
325 Mesh = 20% Maximum
Pan = 6% Maximum

SaberPack BL-55 is a good general purpose interleaving powder and is especially well suited to situations where the glass will be stored in humid climates and the duration of storage and / or transportation is expected to be longer than 6 weeks. BL-55 is very effective at reducing the occurrence of Stage II corrosive staining.

SaberPack recommends an application rate for BL-55 in the range of 150 to 250 mg/sq meter. Static electricity is the primary force which holds interleaving powder to a glass surface. An application rate in excess of 300 mg/sq meter will typically exceed the capability of the static electric force to retain the powder and migration of the powder off of the glass surface is very likely.

*BL-55 is consistently very free flowing. It is critical that dispensing systems be closely monitored when BL-55 is first introduced. Typically, dispensing systems must be "dialed back" to reduce the rate of application. Failure to reduce the dispenser settings frequently leads to excessive coverage and loss of powder from the glass surface. This is especially noticeable in the pack out area and is associated with a significant increase in slip / fall hazards and irritation to the skin, eyes and nose of production workers. With proper dispenser system settings the free flowing character of BL-55 usually allows for a reduction in the amount of powder used when compared to other interleaving powders.

For information about methods for determining application rate please refer to the SaberPack Technical bulletin titled ***SaberPack Analysis Methods.***

Storage

It is important to store the material in a location where the air temperature and humidity do not experience wide and frequent changes. Storage in the lehr area may fulfill this requirement because the temperature and humidity in this area is usually fairly consistent.

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Powder removal / washing

Typically, BL-55 can be removed easily with water. In extreme climate conditions if the application of BL-55 has exceeded the recommended coverage rate it is possible that an agglomerated residue may form on the glass surface which may be difficult to wash off. If this should occur the residue can be removed by the addition of a small amount of white vinegar or citric acid to the wash water. This problem can be avoided if the powder is not applied in excess. Washing temperatures should not exceed 35C as elevated temperatures do not significantly improve the solubility of BL-55 and may actually tend to cause the wash water to develop a greasy characteristic.

Another consideration regarding BL-55 relates to wash system sensors. BL-55 has a pH in the range of 4.5 – 5.5. This is not as acidic as adipic acid based, or other interleaving powders. Some washing systems rely on a change in the resistance of the wash water to call for the introduction of fresh water. Wash water which is saturated with boric acid may not achieve sufficient conductivity to indicate the need for fresh wash water. Minor adjustments to the washing system may be required.