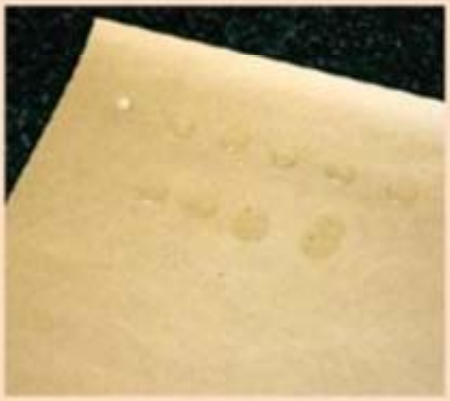
Hello moisture free packaging!

Cortec introduces EcoShield, a super barrier paper and linerboard, for an environmentally friendly replacement of polycoated and waxed papers.

A major threat to raw materials and finished goods of all kinds, particularly those made of metal and prone to rust and corrosion is moisture. Greases and oils sometimes used as lubricants or rust preventatives on metal components add another problem by threatening to leak through packaging and contaminate surrounding areas. Waxed or polycoated papers are traditional moisture-resistant packaging options for problems like these. However, such coated papers pose an environmental problem because they are not recyclable and repulpable. Even if recycled back into the pulp and paper stream, they would first have to go through a costly process of separating the paper base from the coating.

To avoid this environmental problem, Cortec Corporation has developed an environmentally acceptable replacement to unrecyclable polycoated and waxed papers. Its new high gloss EcoShield super barrier paper and linerboard relies on a water-based moisture barrier coating for moisture resistance. The technology makes the paper fully recyclable and repulpable without requiring costly processes to remove the coating from the paper. In addition to recyclability, the EcoShield super barrier paper and linerboard demonstrated better water vapor barrier properties than polycoated paper and waxed paper during testing.

To evaluate the moisture resistance of EcoShield super barrier and linerboard, the barrier paper was tested against a comparable polyethylene coated paper and a commercial waxed paper according to ASTM E-96 at 73°F (23°C) and 50% relative humidity. The EcoShield super barrier paper and linerboard showed a water vapor transfer rate of 0.32-0.37 grams per hour on a square meter of paper. A polycoated paper in the same test allowed slightly more water vapor to pass



through in the same time frame, at the higher rate of 0.47-0.71 grams per hour. The waxed paper was much less resistant to water vapor, allowing it to transfer at a rate of 6.5-6.9 grams per hour on the same size of paper. Though it is not intended for applications involving constant water contact, the shiny side of EcoShield also has the ability to repel liquid water. Its TAPPI T-441 Cobb water absorption rate is less than 0.3 grams of water per square meter in 2 minutes.

It also has excellent oil/grease resistance and registers a high kit test value of 12, representing the highest amount of an aggressive liquid

solution to remain on the paper surface without causing the paper to fail. The high gloss paper not only protects against the ingress of moisture or grease into a package, but it also protects against the leaching of oil and grease out of a package. This is important when manufacturer's specifications require the use of greasy rust preventatives, or when the metal equipment being wrapped, packaged, or shipped contains lubricated parts. EcoShield can discourage these oils and greases from seeping out of the package and causing packaging failure or contamination of nearby materials.

The versatility of EcoShield, as a flexible and moisture barrier material, allows it to be used for a variety of packaging applications and beyond:

- Protecting moisture sensitive components
- Wrapping oily or greasy parts
- Lining wood pallets or corrugated boxes
- Packaging products
- Keeping work surfaces clean with a disposable cover.

Whether moisture threatens from the inside or the outside of a package, EcoShield is an environmentally friendly way to protect against damage from moisture, grease, and oil.