

KapStone Kraft Liner

TYPICAL USES

Packaging

Corrugated Containers
Laminations
Wraps

INTRODUCTION

KapStone linerboard grades are two-ply, natural kraft substrates designed to provide optimum performance when combined with corrugating medium in the construction of corrugated boxes.

Three distinct gradelines are offered: Regular, Mullen-standard Kraft Liner (KL), High Compression Liner (HCL) and Ultra Performance Liner (UPL).

Superior strength, appearance and performance standards make KapStone grades ideal for corrugated boxes as well as specialty non-box applications.

PRODUCT

KapStone Kraft Liner

FEATURES AND BENEFITS

KapStone's basic Kraft Liner sets the standard for consistent, balanced structure; appearance and performance. Two-ply construction and rigorous production standards combine specially refined top and bottom kraft fibers for reliable strength, printability and converting performance.

KapStone High Compression Liner

Produced under rigorous manufacturing standards, KapStone HCL provides 15% greater strength per pound than standard kraft liner, allowing significant box weight reduction while maintaining excellent box compression strength, printability and appearance.

KapStone Ultra Performance Liner

Produced with demanding fiber preparation strategy and tightly controlled paper machine operating parameters, KapStone UPL grades deliver superior strength per pound with a 25% weight reduction compared to standard kraft liner. These grades provide ultimate weight reduction with excellent strength, converting and printability.

CERTIFICATIONS

Manufacturing

Charleston product manufactured under a registered ISO 9001-2000 series quality management system

Forestry and Procurement

SFI® Fiber Procurement and Chain of Custody Certification
PEFC™ Chain of Custody Certification*
FSC® Chain of Custody Certification*
ATFS Certification

Food Contact

Compliance with USFDA 21 CFR §176.170 and 21 CFR §176.180
Packaging for all food types I, II, IV, V, VIA, VIB, VII, VIII, IX
(Ref. 21 CFR 176.170, Table 1)
Conditions of use: A through H (Ref. 21 CFR 176.170, Table 2)

Environmental and Safety

US California Proposition 65 Compliant
CONEG Model Heavy Metal and EC/94/62 Article II Compliant
CPSC 16 CFR 1303 Lead Ban Compliant
Elemental Chlorine Free (ECF) Unbleached Fiber
RoHS Compliant

PRODUCT CLASSIFICATIONS

Product Type

Unbleached Linerboard

Structure

Uncoated kraft, two-ply paperboard



* Applies for Charleston Mill grades

KapStone Kraft Liner (KL)- Grade Availability & Typical Properties

| Grade Availability by Weight | | | | | | | | | Units | Method |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|------------------|--------|
| Basis Wt. | 20 | 22 | 26 | 33 | 42 | 51 | 57 | 69 | lb/1000 sq ft | T-410 |
| Moisture | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | percent | T-412 |
| Sheffield Roughness | 350-400 | 350-400 | 350-400 | 350-400 | 350-400 | 350-400 | 350-400 | 350-400 | Sheffield Units | T-538 |
| Mullen | 60 | 65 | 75 | 90 | 110 | 125 | 145 | 155 | psi | T-807 |
| Cobb, Top | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | g/m ² | T-441 |
| Cobb, Bottom | 55 | 55 | 50 | 50 | 50 | 50 | 50 | 50 | g/m ² | T-441 |
| Taber Abrasion | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | mg/1000 rev | T-476 |
| Gurley Porosity | 20 | 20 | 20 | 20 | 25 | 25 | 25 | 25 | sec | T-460 |

KapStone High Compression Liner (HCL) - Typical Properties

| Grade Availability by Weight | | | | Units | Method |
|------------------------------|--------|--------|--------|------------------|--------|
| Basis Wt. | 35 | 47 | 55 | lb/1000 sq ft | T-410 |
| Moisture | 7.0 | 7.0 | 7.0 | percent | T-412 |
| Cobb, Top | 45 | 45 | 45 | g/m ² | T-441 |
| Cobb, Bottom | 50 | 50 | 50 | g/m ² | T-441 |
| STFI CD | 21.0 | 26.0 | 32.0 | lb/in | T-826 |
| Taber Abrasion | 50-100 | 50-100 | 50-100 | mg/1000 rev | T-476 |
| Gurley Porosity | 18 | 25 | 25 | sec | T-460 |

KapStone Ultra Performance Liner (UPL) - Typical Properties

| Grade Availability by Weight | | | | | | | | Units | Method |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|------------------|--------|
| Basis Wt. | 24 | 27 | 29 | 31 | 33 | 42 | 50.5 | lb/1000 sq ft | T-410 |
| Moisture | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | percent | T-412 |
| Cobb, Top | 45 | 45 | 45 | 45 | 45 | 45 | 45 | g/m ² | T-441 |
| Cobb, Bottom | 55 | 55 | 55 | 55 | 55 | 55 | 55 | g/m ² | T-441 |
| STFI CD | 16.5 | 18.5 | 20.0 | 21.0 | 22.5 | 28.0 | 33.5 | lb/in | T-826 |
| Taber Abrasion | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | 50-100 | mg/1000 rev | T-476 |
| Gurley Porosity | 25 | 25 | 25 | 25 | 25 | 40 | 35 | sec | T-460 |



KAPSTONE®

For more information about this product, please contact your KapStone representative, service partner or merchant.

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