# Spectro C1S and C2S

Digital and Digital for HP Indigo

Spectro is the paperboard designed to deliver superior quality, converting to eye-catching marketing collateral that stands out from the crowd. It's a single-ply SBS with enhanced optics, making it ideal for premium digital applications that call for dynamic and vibrant images. It's the paperboard that provides a high-end experience, creating the perfect combination to make a lasting impression.

### The Spectro Digital experience

#### **Product uses**

- Luxury beverage
- · Cosmetics and perfume
- · Health and beauty care
- · Covers (books and magazines)
- · Greeting cards, folders, lottery
- Calendars
- · Shopping bags
- POS material
- Menus
- Direct mail
- · Pharmaceutical and OTC
- Confectionery
- Fashion and lifestyle
- Consumer electronics

### **Product classification**

Solid Bleached Sulfate (SBS)1

### Premium surface and printability

Spectro Digital delivers a uniform side-to-side printing surface, and its smooth surfaces feature a proprietary coating engineered for brilliant color reproduction, sharper details, and better ink hold-out. Whether using UV, aqueous, or specialty coatings, hot foil stamping, embossing, special effects, or varnishes, Spectro has the surface for the most demanding applications.

### **Enhanced optics for lasting impact**

With a vibrant blue-white shade, high brightness, and unique coating formulation, Spectro minimizes fade resistance—ensuring lasting whiteness and image integrity.

### A breadth of applications

From direct mail to luxury goods packaging to POS materials, Spectro offers unrivaled versatility for both commercial print and packaging applications as you build your brand. Expect high-quality performance across numerous applications, including digital and folio sizes, all made and stocked in the US for quicker availability.

### Highest possible three-star rating

Spectro Digital for HP Indigo C1S and C2S products earned the highest three-star rating from the Rochester Institute of Technology Printing Applications Laboratory. The rating is based on runnability, adhesion, and blanket compatibility as a part of the HP Indigo Media Certification Program.

### **Product attributes:**

- High percentage of ink adhesion
- Excellent runnability with a high level of blanket cleanliness during normal testing intervals
- · Side-to-side consistency
- Achieved photo-recommended levels of testing

## Strict tolerance standards and side-to-side consistency

Manufactured within the tightest tolerance standards in the industry, the Spectro C1S uniform printing surface delivers minimal variability, while Spectro C2S has the most consistent side-to-side printing surface available, delivering minimal variability within and across runs.

### Consistent downstream performance

As a premium paperboard, Spectro has the strength and durability to offer optimum convertibility for folding, die-cutting, gluing, and other converting applications. It's designed with exceptional dimensional stability, providing more flexibility in layout and downstream operations.

### Food contact/health and safety

Spectro Digital C1S and C2S are produced with added optical brightening agents (OBAs).

- US FDA Title 21 §CFR 176.170 and 176.180 compliant (restrictions apply)
- Canada Food and Drug Regulations, C.R.C., c. 870, Division 23, Food Packaging Materials compliant
- Elemental chlorine-free (ECF)
- Canada EPA Chemical Challenge List compliant
- California Proposition 65 (labeling is not required)
- REACH Regulation 1907/2006/EC (registration is not required and the product does not contain any substances found on the SVHC Candidate List)
- RoHS (Restriction of Hazardous Substances) compliant
- Heavy metals: compliant with the Model Toxics in Packaging Legislation (formerly known as CONEG) and Directive 94/62/EC



### The Sappi experience

### Innovation

In our state-of-the-art Somerset Mill located in Skowhegan, Maine, we continue to invest in machinery designed to deliver a high-quality product with optimal performance throughout the converting process.

### Sales and tech support

Our teams have the expertise and dedication to ensure customer success before and after the sale. The Sappi technical services group can help with all aspects of printing and converting, and our sales team provides end-to-end packaging support.

### Non-integrated supplier

With Sappi, your business is your business. We focus only on producing paperboard—prioritizing the needs of customers and providing you with a quality, cost-efficient product.

### Sustainability

Sappi North America is an industry leader in sustaining a low carbon footprint, with approximately 81% of our energy generated from renewable or alternative fuels. We are committed to decreasing energy consumption, reducing waste, and improving process efficiencies across our entire manufacturing process. In 2021 we earned a Platinum rating from EcoVadis, a highly regarded rating firm assessing over 30,000 companies annually around the globe. Our Platinum rating puts us in the top 1% of all companies surveyed across a broad range of social and environmental indicators.

### Certifications

All of Sappi North America's US-based coated paper and packaging mills are triple-certified in accordance with the leading global sustainable forestry Chain-of-Custody certification systems, including the Forest Stewardship Council® (FSC®-Co14955), the Sustainable Forestry Initiative® (SFI®) program, and the Programme for the Endorsement of Forest Certification (PEFC/29-31-10). Product certifications are available upon request, pending availability of credits. The producing mill is ISO 9001, ISO 14001, and ISO 45001 certified.

#### Press certifications

Spectro C1S and C2S have been certified as compatible with all HP Indigo Digital Offset Color presses, including the HP 7000, 7500, 7600, 7800, 1000, and 12000. In addition, Spectro Digital is suitable for many other dry toner digital printing presses.

### Spectro C1S Digital and Digital for HP Indigo targets—grade properties by caliper'

IMPERIAL					UNITS	METHODS	TOLERANCE
Caliper	10	12	14	16	mils	TAPPI T411	± 0.5
Thickness	254	305	356	407	micron	TAPPI T411	± 12.7
Nominal BW (24" x 36")	120	141	158	177	lb/3000 ft <sup>2</sup>	TAPPI T410	
Cover Weight (20" x 26")	72	85	95	106			
Grammage	195	230	257	288	gsm	TAPPI T410	

### Spectro C2S Digital and Digital for HP Indigo targets—grade properties by caliper

IMPERIAL					UNITS	METHODS	TOLERANCE
Caliper	10	12	14	16	mils	TAPPI T411	± 0.5
Thickness	254	305	356	407	micron	TAPPI T411	± 12.7
Nominal BW (24" x 36")	145	171	196	217	lb/3000 ft <sup>2</sup>	TAPPI T410	
Cover Weight (20" x 26")	87	103	119	132			
Grammage	236	278	319	353	gsm	TAPPI T410	

### Spectro C1S and C2S Digital and Digital for HP Indigo targets—coated side

L\*a\*b\* Paper White: 95.85, -0.07, -5.353 95.50, 1.05, -3.40<sup>4</sup>

COATED SIDE					UNITS	METHODS	TOLERANCE
Caliper	10	12	14	16	mils	TAPPI T411	± 0.5
Brightness	92	92	92	92	percent		
Smoothness	1.0	1.0	1.0	1.0			
Gloss	50	50	50	50			

- 1 SBS produced with proprietary blend of bleached chemical fiber and high-quality bleached chemicalthermo mechanical pulp.
- 2 Spectro C1S and C2S are tightly controlled to caliper. Basis weight may vary by production run
- 3 CIE L\*a\*b\* values are approximate and stated with UV included, according to ISO 5631-2:2015 guidelines. The color measurement methodology incorporates CIE standard illuminant D65 (simulated), 10° Standard Observer, and d/0° illumination/measurement geometry. Average CIE L\*a\*b\* data are presented for relative paperboard shade comparisons—not as product specifications.
- 4 CIE L\*a\*b\* values are approximate and in conformance with ISO 13655:2017. Data are specified according to the measurement condition M0; measured using an X-Rite eXact, configured to D50, 2° Standard Observer, 45/O measurement geometry, with white (self) backing. Values may vary significantly when measured with different instruments. Average CIE L\*a\*b\* data are presented for relative paperboard shade comparisons—not as product specifications. Paper white values specified according to the measurement condition M1 are available upon request.

All values listed are approximate and subject to change.

Sappi packaging products may be available as certified upon request. For more information, please contact your Sappi representative or visit our website at sappi.com.

The data, specifications, and/or certifications provided herein are current as of the date of printing and may change without notice at Sappi's discretion.

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Spectro Digital C2S 12pt, 4-color process

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