

Technical Specifications

(Effective Dates: 01/01/2016 – 12/31/2016)



End use

FibreShield® 2410 is a fully extensible sack paper used for high speed converting and filling lines that require superior Tensile Energy Absorption (TEA) and optimum strength properties in machine and cross directions. It is ideal for use in 2-ply sacks with microperfs where low Gurley porosity is not required but extensible performance is needed.

FibreShield 2410 is used in pasted valve shipping sacks for multiple end uses including cement, building materials, chemicals, and fertilizers.

Options

FibreShield 2410 is available in various basis weights from 43 – 60lbs.

Compliance and Sustainability

FibreShield is manufactured in compliance with FDA, CONEG, and RoHS regulations and is SFI Certified.

Property	Units	Typical Value				
Basis Weight	lbs/3000 ft ²	43.0	46.1	49.2	52.2	55.3
Tensile MD	lbs/in.	33.2	35.4	38.1	41.0	43.5
Tensile CD	lbs/in.	25.8	28.1	30.1	31.8	32.5
Stretch MD	%	7.8	7.8	7.8	7.8	7.8
Stretch CD	%	9.0	9.0	8.8	8.6	8.6
TEA MD	ft. lbs/ft ²	18.1	19.3	20.7	21.9	22.9
TEA CD	ft. lbs/ft ²	19.3	19.8	20.9	21.8	22.4
TEAR MD	grams	84	94	102	108	113
TEAR CD	grams	100	108	115	123	138
Porosity	sec/100cc	15	15	15	15	15
Cobb	g/m ²	34	34	34	34	34
Moisture	%	7.5	7.5	7.5	7.5	7.5

Laboratory conditions 73°F, 50% RH (ISO 554-1976)

Spec 2410
FibreShield®



Technical Specifications

(Effective Dates: 01/01/2016 – 12/31/2016)



End use

FibreShield® 2416-Porous is a fully extensible sack paper used for high speed converting and filling lines that require superior Tensile Energy Absorption (TEA) and optimum strength properties in machine and cross directions. It is ideal for use in non-perforated 2-ply sacks where low Gurley porosity is critical and extensible performance is needed.

FibreShield 2416-Porous is used in pasted valve shipping sacks for multiple end uses including cement, building materials, chemicals, and fertilizers.

Options

FibreShield 2416-Porous is available in various basis weights from 43 – 55.3lbs.

Compliance and Sustainability

FibreShield is manufactured in compliance with FDA, CONEG, and RoHS regulations and is SFI certified.

Property	Units	Typical Value				
Basis Weight	lbs/3000 ft ²	43	46.1	49.2	52.2	55.3
Tensile MD	lbs/in.	31.4	33.9	36.5	38.2	40.4
Tensile CD	lbs/in.	24.8	26.5	28.5	30.0	31.6
Stretch MD	%	7.8	7.8	7.8	7.8	7.8
Stretch CD	%	8.7	8.6	8.6	8.4	8.4
TEA MD	ft. lbs/ft ²	17.0	18.5	19.3	19.9	20.9
TEA CD	ft. lbs/ft ²	16.7	17.6	18.8	19.4	20.0
TEAR MD	grams	98	104	119	127	137
TEAR CD	grams	116	124	133	141	154
Porosity	sec/100cc	5	5	5	5	5
Cobb	g/m ²	35	35	35	35	35
Moisture	%	7.5	7.5	7.5	7.5	7.5

Laboratory conditions 73°F, 50% RH (ISO 554-1976)

Spec 2416 - Porous FibreShield®



End Use

TEA-Kraft® is a semi-extensible, high-performance multiwall sack paper for three-ply applications. It is ideal for use in three-ply bags such as pasted valve bags with microperforations where low Gurley porosity is not critical.

TEA-Kraft is designed for industrial sacks with various types of sack construction: pasted valve and pinched-bottom open mouth.

TEA-Kraft end-use sack applications include: cement building materials, chemicals, baking products, pet foods and more.

Compliance

TEA-Kraft is manufactured in compliance with FDA, CONEG and RoHS regulations. Our paper is thoroughly tested to ensure that strict substance limits are met.

Sustainable

At KapStone, our products start from trees, a renewable resource. Our TEA-Kraft paper is made from virgin wood pulp fiber. Our virgin furnish, a blend of Northern softwoods including Douglas fir, pine, hemlock and spruce, provides superior strength properties in our paper.

<u>Property</u>	<u>Units</u>	<u>Typical Values</u>							<u>Test Method</u>
Substance	lbs. / 3000 ft ²	43	46.1	49.2	52.2	55.3	60		On-line Scanning
Tensile MD	lbs./in.	30.4	32.6	35.3	37.6	39.4	42.8		ISO 1924-3
Tensile CD	lbs./in.	21.1	23.7	25.2	27.2	27.9	31.5		ISO 1924-3
Stretch MD	%	6.5	6.5	6.5	6.5	6.5	6.5		ISO 1924-3
Stretch CD	%	8.0	8.0	8.0	8.0	7.8	7.8		ISO 1924-3
TEA MD	ft. lbs./ft ²	13.5	14.9	16.2	16.9	17.9	19.5		ISO 1924-3
TEA CD	ft. lbs./ft ²	13.3	15.9	16.8	17.1	17.8	19.5		ISO 1924-3
Tear MD	grams	101	112	123	135	139	158		ISO 1974
Tear CD	grams	121	133	146	152	167	180		ISO 1974
Cobb 1 Min.	g/m ²	34	34	34	34	34	34		ISO 535
Porosity	Sec/100 cc	15	15	15	15	15	15		ISO 5636-3
Moisture	%	7.5	7.5	7.5	7.5	7.5	7.5		On-line Scanning

Laboratory conditions 73.4 °F, 50% RH (ISO 554-1976)



KAPSTONE®

300 Fibre Way
P.O. Box 639
Longview, WA 98632
360.425.1550
kapstonepaper.com

TEA-KRAFT[®] Porous

Spec 2406

End Use

TEA-Kraft[®] is a semi-extensible, high-performance multiwall sack paper for three-ply applications. It is ideal for use in three-ply bags such as pasted valve bags where high porosity is critical.

TEA-Kraft is designed for industrial sacks with various types of sack construction: pasted valve and pinched-bottom open mouth.

TEA-Kraft end-use sack applications include: cement building materials, chemicals, baking products, pet foods and more.

TEA-Kraft is manufactured in compliance with FDA, CONEG and RoHS regulations. Our paper is thoroughly tested to ensure that strict substance limits are met.

Sustainable

At KapStone, our products start from trees, a renewable resource. Our TEA-Kraft paper is made from virgin wood pulp fiber. Our virgin furnish, a blend of Northern softwoods including Douglas fir, pine, hemlock and spruce, provides superior strength properties in our paper.

Compliance

<u>Property</u>	<u>Units</u>	<u>Typical Values</u>				<u>Test Method</u>
Substance	lbs. / 3000 ft ²	43	46.1	49.2	55.3	On-line Scanning
Tensile MD	lbs./in.	28.1	29.8	31.9	35.9	ISO 1924-3
Tensile CD	lbs./in.	22.3	23.8	25.5	28.6	ISO 1924-3
Stretch MD	%	6.5	6.5	6.5	6.5	ISO 1924-3
Stretch CD	%	8.0	8.0	8.0	7.7	ISO 1924-3
TEA MD	ft. lbs./ft ²	12.8	13.9	14.7	16.7	ISO 1924-3
TEA CD	ft. lbs./ft ²	13.0	14.1	14.9	16.8	ISO 1924-3
Tear MD	grams	110	121	116	134	ISO 1974
Tear CD	grams	112	125	133	159	ISO 1974
Cobb 1 Min.	g/m ²	35	35	35	35	ISO 535
Porosity	Sec/100 cc	5	5	5	5	ISO 5636-3
Moisture	%	7.5	7.5	7.5	7.5	On-line Scanning

Laboratory conditions 73.4 °F, 50% RH (ISO 554-1976)



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360.425.1550
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End Use

TEA-Kraft® Rigid is a semi-extensible, high-performance multiwall sack paper for three-ply applications.

TEA-Kraft Rigid is designed for superior machine direction stiffness for improved converting and filling with good strength properties.

TEA-Kraft Rigid end-use sack applications include: sewn open mouth and pinch bottom bags for food, pet food, potato baler and non-dusty chemicals sacks.

Compliance

TEA-Kraft is manufactured in compliance with FDA, CONEG and RoHS regulations. Our paper is thoroughly tested to ensure that strict substance limits are met.

Sustainable

At KapStone, our products start from trees, a renewable resource. Our TEA-Kraft paper is made from virgin wood pulp fiber. Our virgin furnish, a blend of Northern softwoods including Douglas fir, pine, hemlock and spruce, provides superior strength properties in our paper.

<u>Property</u>	<u>Units</u>	<u>Typical Values</u>						<u>Test Method</u>
Substance	lbs. / 3000 ft ²	43	46.1	49.2	55.3	60	65	On-line Scanning
Tensile MD	lbs./in.	36.1	39.4	41.8	46.2	49.4	53.3	ISO 1924-3
Tensile CD	lbs./in.	21.8	22.9	25.0	27.4	29.4	31.6	ISO 1924-3
Stretch MD	%	3.0	3.0	3.0	3.0	3.0	3.0	ISO 1924-3
Stretch CD	%	8.0	8.0	7.9	7.8	7.7	7.4	ISO 1924-3
TEA MD	ft. lbs./ft ²	8.8	8.9	9.5	10.6	11.4	12.4	ISO 1924-3
TEA CD	ft. lbs./ft ²	13.5	14.5	15.8	17.3	18.0	19.2	ISO 1924-3
Tear MD	grams	102	111	123	138	152	165	ISO 1974
Tear CD	grams	106	123	135	155	172	189	ISO 1974
Cobb 1 Min.	g/m ²	33	33	33	33	33	33	ISO 535
Porosity	Sec/100 cc	18	18	18	18	18	18	ISO 5636-3
Moisture	%	7.5	7.5	7.5	7.5	7.5	7.5	On-line Scanning

Laboratory conditions 73.4 °F, 50% RH (ISO 554-1976)



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