



J.D. IRVING, LIMITED

# IRVING PULP & PAPER, LIMITED

PRODUCT SPECIFICATIONS - January 2016

## World Class Pulp Quality-World First Innovation for the Environment

Irving Pulp and Paper specializes in fibres for premium tissue and paper products, supplying Maple, Mixed Hardwood, and NBSK grades to customers all over the world. Shipping by rail, truck, or ocean service ensures flexibility and cost-effective delivery. Warehouse managed-inventory can support a range of manufacturing needs on a just-in-time basis.



## Softwood Kraft Pulp

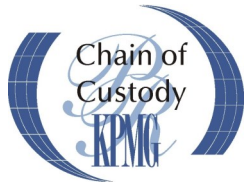
*Typical Properties (includes ± 2 standard deviations) —Oxygen Delignified, Elemental Chlorine-Free Softwood Kraft Pulp*

DESCRIPTION				
ISO BRIGHTNESS	%	89.2 ± 1.2		
*TAPPI DIRT COUNT (based on TAPPI. Includes all particles >=0.1mm)	PPM	0.6 ± 0.6		
AIR DRY	%	90.0 ± 2.8		
INTRINSIC VISCOSITY	cm <sup>3</sup> /g	735 ± 49	0.5% CED cPs	15.2 ± 2.4
INITIAL FREENESS	(°SR)	19 ± 2	CSF (ml)	616 ± 36
INITIAL TEAR FACTOR	mN m <sup>2</sup> /g	19 ± 4	100 gf.m <sup>2</sup> /g	196 ± 42
INITIAL TENSILE	m	5260 ± 1080		
INITIAL BURST FACTOR	kPa m <sup>2</sup> /g	3.4 ± 1.0	(gf.cm <sup>2</sup> )/(g/m <sup>2</sup> )	35 ± 10
INITIAL BULK	cm <sup>3</sup> /g	1.7 ± 0.2		
pH		6.3 ± 0.2		
LENGTH WEIGHTED AVERAGE FIBRE LENGTH	mm	2.05 ± 0.16		
LENGTH WEIGHTED AVERAGE FINES	%	2.28 ± 0.58		

TYPICAL FIBRE COMPOSITION				
BLACK & WHITE SPRUCE	%		46 ± 16	
BALSAM FIR	%		34 ± 18	
PINE	%		19 ± 18	

Bale Specifications		Wrapper Specifications	
Bale Weight	525-535 lbs	Sheet Size	52" L x 54.5" W x 30" H
Bale Dimensions	32" L x 32" W x 17" H	Sheet Thickness	3.2 mm
Unitized Stack	8 bales	Wrapper Pallet	1 ADMT

Irving Pulp and Paper is the first pulp mill in the world to apply reverse osmosis. An award winning pollution prevention technology



**MILL SITE ADDRESS:**  
 408 Mill Street, P.O. Box 3007  
 Saint John, New Brunswick  
 Canada, E2L 5B6  
 Tel: (506) 635-6666

**SALES OFFICE ADDRESS:**  
 300 Union Street, P.O. Box 5666  
 Saint John, New Brunswick  
 Canada, E5C 2K4  
 Tel: (506) 632-5102  
 Fax: (506) 633-4021  
 E-mail: rees.sharon@jdirving.com



J.D. IRVING, LIMITED

# IRVING PULP & PAPER, LIMITED

PRODUCT SPECIFICATIONS - January 2016

## World Class Pulp Quality-World First Innovation for the Environment

Irving Pulp and Paper specializes in fibres for premium tissue and paper products, supplying Maple, Mixed Hardwood, and NBSK grades to customers all over the world. Shipping by rail, truck, or ocean service ensures flexibility and cost-effective delivery. Warehouse managed-inventory can support a range of manufacturing needs on a just-in-time basis.



## Mixed Hardwood Kraft Pulp

*Typical Properties (includes ± 2 standard deviations) —Oxygen Delignified, Elemental Chlorine-Free Mixed Hardwood Kraft Pulp*

DESCRIPTION				
ISO BRIGHTNESS	%	89.8 ± 1.2		
*TAPPI DIRT COUNT (based on TAPPI. Includes all particles >=0.1mm)	PPM	0.6 ± 0.6		
AIR DRY	%	90.0 ± 2.4		
INITIAL FREENESS	(°SR)	28 ± 8	CSF (ml)	451 ± 102
INITIAL TEAR	mN m <sup>2</sup> /g	9.4 ± 6.3	100 g <sub>f</sub> .m <sup>2</sup> /g	95 ± 64
INITIAL TENSILE	m	4790 ± 970		
INITIAL BURST FACTOR	kPa m <sup>2</sup> /g	2.5 ± 1.5	(g <sub>f</sub> .cm <sup>2</sup> )/(g/m <sup>2</sup> )	25 ± 10
INITIAL BULK	cm <sup>3</sup> /g	1.7 ± 0.1		
pH		6.3 ± 0.6		
LENGTH WEIGHTED AVERAGE FIBRE LENGTH	mm	0.92 ± 0.18		
LENGTH WEIGHTED AVERAGE FINES	%	4.33 ± 1.38		
TYPICAL FIBRE COMPOSITION				
HARDWOOD	%		85 ± 10%	
SOFTWOOD	%		15 ± 10%	

Bale Specifications	
Bale Weight	525-535 lbs
Bale Dimensions	32" L x 32" W x 17" H
Unitized Stack	8 bales

Wrapper Specifications	
Sheet Size	52" L x 54.5" W x 30" H
Sheet Thickness	3.2 mm
Wrapper Pallet	1 ADMT

Irving Pulp and Paper is the first pulp mill in the world to apply reverse osmosis. An award winning pollution prevention technology



**MILL SITE ADDRESS:**  
 408 Mill Street, P.O. Box 3007  
 Saint John, New Brunswick  
 Canada, E2L 5B6  
 Tel: (506) 635-6666

**SALES OFFICE ADDRESS:**  
 300 Union Street, P.O. Box 5666  
 Saint John, New Brunswick  
 Canada, E5C 2K4  
 Tel: (506) 632-5102  
 Fax: (506) 633-4021  
 E-mail: rees.sharon@jd Irving.com



J.D. IRVING, LIMITED

# IRVING PULP & PAPER, LIMITED

PRODUCT SPECIFICATIONS - January 2016

## World Class Pulp Quality-World First Innovation for the Environment

Irving Pulp and Paper specializes in fibres for premium tissue and paper products, supplying Maple, Mixed Hardwood, and NBSK grades to customers all over the world. Shipping by rail, truck, or ocean service ensures flexibility and cost-effective delivery. Warehouse managed-inventory can support a range of manufacturing needs on a just-in-time basis.

## Maple Kraft Pulp

*Typical Properties (includes ± 2 standard deviations) —Oxygen Delignified, Elemental Chlorine-Free Maple Kraft Pulp*

DESCRIPTION				
ISO BRIGHTNESS	%	89.5 ± 1.2		
*TAPPI DIRT COUNT (based on TAPPI. Includes all particles >=0.1mm)	PPM	0.6 ± 0.6		
AIR DRY	%	89.8 ± 2.4		
INITIAL FREENESS	(°SR)	38 ± 6	CSF (ml)	336 ± 64
pH		6.2 ± 0.2		
LENGTH WEIGHTED AVERAGE FIBRE LENGTH	mm	0.69 ± 0.06		
LENGTH WEIGHTED AVERAGE FINES	%	5.47 ± 1.22		
TYPICAL FIBRE COMPOSITION				
HARDWOOD	%			90%
SOFTWOOD	%			10%

Bale Specifications		Wrapper Specifications	
Bale Weight	525-535 lbs	Sheet Size	52" L x 54.5" W x 30" H
Bale Dimensions	32" L x 32" W x 17" H	Sheet Thickness	3.2 mm
Unitized Stack	8 bales	Wrapper Pallet	1 ADMT

**MILL SITE ADDRESS:**  
 408 Mill Street, P.O. Box 3007  
 Saint John, New Brunswick  
 Canada, E2L 5B6  
 Tel: (506) 635-6666

**SALES OFFICE ADDRESS:**  
 300 Union Street, P.O. Box 5666  
 Saint John, New Brunswick  
 Canada, E5C 2K4  
 Tel: (506) 632-5102  
 Fax: (506) 633-4021  
 E-mail: rees.sharon@jdirving.com



Irving Pulp and Paper is the first pulp mill in the world to apply reverse osmosis. An award winning pollution prevention technology

