



Section 1. Product and Company Identification

Product Group	: Cellulose Containerboard
Trade Names or Grades	: EnduraLiner™, EnduraLiner™ HP Max, EnduraLiner™ Wet Strength, EnduraLiner™ GR, DiamondTop™, DiamondTop™ HP, DiamondTop™ 1C, DiamondTop™ 2C, DiamondTop™ GR, EnduraFlute™, TechniFlute™, Linerboard, White Top Liner, Medium, Bleached Linerboard, Coated White Top Linerboard, RockmaX, Grease Resistant Liner, White Top Grease Resistant Liner, Natural Kraft Linerboard, Bleached Linerboard, Wet Strength linerboard, Premium White Top Liner, Recycled Linerboard, Recycled Medium, Fluting, White Top Kraft Liner
Synonyms	: Corrugating Medium, Linerboard
Chemical Name/Class	: Cellulose Paperboard
Company	: WestRock 1000 Abernathy Road NE Atlanta GA 30328 770-448-2193
Emergency Phone	: (800) 424-9300 (CHEMTREC)

Section 2. Hazards Identification

This product as sold is a solid product which is not regulated under WHMIS 2015. During processing, combustible dust may be generated and the following information applies under OSHA HazCom 2012:

GHS Classification	: Combustible Dust (OSHA Defined Hazard)
Signal Word	: Warning
Hazard Statement(s)	: May form combustible dust concentrations in air, if small particles are formed during processing, handling, or by other means.
Hazard Pictogram	: None
Precautionary Statement(s)	: Keep away from all ignition sources including heat, sparks and open flames. Prevent dust accumulations to minimize explosion hazard.
Hazards Not Otherwise Classified	: None.
Ingredients of Unknown Acute Toxicity (>1%)	: Not applicable

Section 3. Composition and Information on Ingredients

No hazardous ingredients.

Section 4. First Aid Measures

- Inhalation** : Excessive dust concentrations may cause unpleasant obstruction in the nasal passages. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.
- Skin Contact** : Wash with mild soap and water.
- Eye Contact** : Dust may mechanically irritate the eyes, resulting in redness or watering. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.
- Ingestion** : Not a likely route of exposure for product during normal use.
- Most Important Symptoms/Effects, Acute and Delayed** : Product dust can cause eye irritation and obstruction in the nasal passages.
- Indication of Immediate Medical Attention and Special Treatment Needed** : Immediate medical attention should not be required.

Section 5. Fire-Fighting Measures

- Suitable Extinguishing Media** : Water or other extinguishing agents as appropriate for fighting fires on surrounding materials.
- Specific Hazards Arising from the Chemical** : Product creates combustible dust when processed. Avoid contact with open flames or sparks. Use good housekeeping to avoid generation and accumulation of dust. Combustion products include carbon monoxide, carbon dioxide and fine particulate in the form of smoke.
- Special Firefighting Equipment/Procedures** : In the event of fire, wear approved self-contained breathing apparatus and appropriate protective clothing.

Section 6. Accidental Release Measures

- Personal Precautions, Protective Equipment, and Emergency Procedures** : Maintain good housekeeping to avoid accumulation of dust on exposed surfaces. Use NIOSH approved filtering facepiece respirator ("dust mask") and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort.
- Methods for Containment and Cleaning Up:** : Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Minimize compressed air blowdown or other practices that generate high dust levels. Use explosion-proof vacuum if necessary during clean-up.

Section 7. Handling and Storage

- Precautions for Safe Handling** : Because of the size of the rolls or bales, physical hazards are the predominant hazards. Safety shoes should be worn when moving rolls by hand or hand tools. Bales and rolls should be stored on flat, clean and even surfaces to prevent tipping.
- Product processing may result in the release of cellulose fibers. Minimize dust generation and accumulation. Maintain good housekeeping to avoid accumulation of dust on exposed surfaces. Product dust may pose a combustible dust hazard.

This product as supplied and shipped is highly unlikely to release sufficient cellulose dust to constitute a combustible dust explosion hazard. Caution should be taken in the processing, handling and use of these materials, particularly if they are in a dry state and dust is produced.

Pulp cellulose, a specific form of cellulose, is reported by NFPA as having a K_{st} value of 62 bar-m/s. According to guidance in the OSHA combustible dust publication "OSHA 3371-08 2009" pulp cellulose dust would be classified as a Class ST 1 combustible dust: (K_{st} dry = > 0 and <= 200 bar-m/s). Depending on airborne concentration, moisture content, particle diameter, surface area and exposure to an ignition source, airborne cellulose dust may ignite and burn with explosive force in a contained area. Cellulose dust may deflagrate if ignited in an open or loosely contained area. Refer to NFPA standards 654, 69 and the NFPA Fire Protection Handbook for guidance.

Conditions for Safe Storage, Including any Incompatibilities : All product material should be stored away from open flame and other sources of ignition.

Section 8. Exposure Controls/Personal Protection

Components with Workplace Control Parameters

None known

Appropriate Engineering Controls

Ventilation : Provide local exhaust as needed so that exposure limits are met. Use with adequate ventilation to ensure exposure levels are maintained below the limits provided (see section 8). Use local exhaust ventilation, and process enclosure if necessary, to control airborne dust. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of cellulose dust within the system.

Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.

Personal Protective Equipment

Respiratory Protection : Use filtering face piece respirator ("dust mask") tested and approved under appropriate government standards such as NIOSH (US) or CSA (Canada), where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort or symptom relief when fiberization of the product occurs. Use respiratory protection in accordance with jurisdictional regulatory requirements similar to the OSHA respiratory protection standard 29 CFR 1910.134 following a determination of risk from potential exposures.

Hand Protection : Not normally required. Cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation or cuts from handling product.

Eye Protection : Approved goggles or tight-fitting safety glasses are recommended when excessive exposures to dust may occur (e.g. during clean up) and when eye contact may occur.

- Body Protection** : Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.
- Hygiene Practices** : Follow good hygienic and housekeeping practices. Clean up areas where cellulose dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

Section 9. Physical and Chemical Properties

- Appearance : Brown, tan or white paper sheets or rolls.
- Odor : No odor
- Odor Threshold : Not applicable
- pH : Not applicable
- Melting/Freezing Point : Not applicable
- Initial Boiling Point and Range : Not applicable
- Flash Point : Not applicable
- Evaporation Rate : Not applicable
- Flammability (solid, gas) : May form combustible dust concentrations in air
- Upper/Lower Explosive Limits : Not applicable
- Vapor Pressure : Not applicable
- Vapor Density : Not applicable
- Relative Density : Not available
- Solubility in Water : Not soluble
- Partition Coefficient : Not available
- Auto-ignition Temperature : 450°F (233 °C)
- Decomposition Temperature : Not available
- Viscosity : Not applicable

Section 10. Stability and Reactivity

- Reactivity** : This product is not reactive.
- Chemical Stability** : This product is stable under normal conditions of use and storage.
- Possibility of Hazardous Reactions** : None known.
- Conditions to Avoid** : Avoid open flame, sparks and other sources of ignition.
- Incompatible Materials** : Not applicable.
- Hazardous Decomposition Products** : Combustion products include carbon monoxide, carbon dioxide and fine particulate in the form of smoke.

Section 11. Toxicological Information

Information on Likely Routes of Exposure

- Inhalation** : Dust may irritate mucous membranes and respiratory system.
- Skin** : Dust may cause mechanical skin irritation.

Eye : Dust may cause mechanical eye irritation.

Ingestion : No hazardous effects expected.

Information on Toxicological Effects

Chronic Health Hazards : No chronic health effects are expected.

Reproductive effects : None of the components are classified as reproductive hazards.

Mutagenic effects : None of the components are classified as mutagens.

Toxicity Data : No specific information available for product in purchased form.

Carcinogenicity : IARC: None of the ingredients are listed by IARC.

NTP: None of the ingredients are listed by NTP.

OSHA: None of the ingredients are listed by OSHA.

Section 12. Ecological Information

Ecotoxicity : This product is not classified as hazardous to the environment. However, release to the environment should be avoided

Persistence and Degradability : Cellulose fiber slowly biodegrades in water (half-life range 1 month – 1 year in freshwater and coastal seawater). Cellulose fiber persists in arid soil (landfills). Other components may not be biodegradable in defined environments.

Bioaccumulative Potential : Not expected to bioaccumulate.

Mobility in Soil : No information available

Other Adverse Effects : Not Applicable

Section 13. Disposal Considerations

Disposal Method : Follow all applicable federal, state, provincial and local regulations. It is the user's responsibility to determine proper disposal methods. For information regarding the compostability of this product, please contact WestRock directly.

Section 14. Transport Information

Transport Information : This product is not regulated for transport by DOT, TDG, IATA, or IMDG

Section 15. Regulatory Information

TSCA : All ingredients of this product are either listed on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

CERCLA : This product does not contain ingredients which are subject to the reporting requirements of CERCLA.

DSL : All ingredients are listed on the Canadian Domestic Substance List.

State Right-to-Know : California - This product does not require a warning under California Proposition 65.

SARA 313 Information : This product does not contain any chemical ingredients that exceed the threshold reporting levels established by SARA Title III, section 313 and 40 CFR section 372.

SARA 311/312 Hazard Category : Refer to Section 2 for OSHA Hazard Classification

Section 16. Other Information

Date Prepared : August 22, 2015

Date Revised : February 12, 2019

Prepared By : WestRock Product Stewardship

WestRock SDS available on: www.westrock.com/sds

This SDS is compliant with 29 CFR 1910.1200. This product is considered non-hazardous under WHMIS 2015 regulations. This product is exempt as an article in the EU. Contact WestRock for more information regarding international applicability of product SDS.

The information and data herein are believed to be accurate and have been compiled by WestRock from external sources believed to be reliable. WestRock provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose and use in compliance with all applicable laws and standards. WestRock will not be liable for claims relating to any party's use of or reliance on information and data contained herein.

Definition of Common Terms:

ACGIH® = American Conference of Governmental Industrial Hygienists

C = Ceiling Limit

CAS# = Chemical Abstracts System Number

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act

DOT = U. S. Department of Transportation

DSL = Canada-Domestic Substance List

EC50 = Effective concentration that inhibits the endpoint to 50% of control population

EC# = European Commission Number

EPA = U.S. Environmental Protection Agency

GHS = Globally Harmonized Standard

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

K_{st} = Index used to classify dust explosion severity

LC₅₀ = Concentration in air resulting in death to 50% of experimental animals

LC_{Lo} = Lowest concentration in air resulting in death

LD₅₀ = Administered dose resulting in death to 50% of experimental animals

LD_{Lo} = Lowest dose resulting in death

LEL = Lower Explosive Limit

LFL = Lower Flammable Limit

MSHA = Mine Safety and Health Administration

NIOSH = National Institute for Occupational Safety and Health

NFPA = National Fire Protection Association

NPRI = Canada- National Pollution Release Inventory

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit

PNOR	=	Particulate Not Otherwise Regulated
PNOS	=	Particulate Not Otherwise Stated
RCRA	=	Resource Conservation and Recovery Act
STEL	=	Short-Term Exposure Limit (15 minutes)
STP	=	Standard Temperature and Pressure
TC _{Lo}	=	Lowest concentration in air resulting in a toxic effect
TDG	=	Canadian Transportation of Dangerous Goods
TD _{Lo}	=	Lowest dose resulting in a toxic effect
TLV	=	Threshold Limit Value
TSCA	=	U.S. Toxic Substance Control Act
TWA	=	Time-Weighted Average (8 hours)
UFL	=	Upper Flammable Limit
WHMIS	=	Canada-Workplace Hazardous Materials Information System



Product Label

Provided in accordance with 29 CFR §1910.1200 (f)(4)

Product Type: **Cellulose Containerboard**

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WARNING

May Form Combustible Dust Concentrations in Air if Small Particles Are Formed During Processing or Handling

Keep dust away from all ignition sources including heat, sparks and flames.
Prevent dust accumulations to minimize explosion hazard.

Manufacturer:

WestRock

1000 Abernathy Road NE

Atlanta, GA 30328

Business Phone: 770-448-2193

Emergency Phone: (800) 424-9300
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