

# Safety Data Sheet (SDS)



## Unbleached Cellulose Paperboard

### 1. Identification

**PRODUCT TRADE NAME(s):** Cinnamon Wallet, Kraft File Folder  
**SYNONYMS:** None

**CHEMICAL NAME/CLASS:** Unbleached Paperboard (Rolls or Sheets)

**MANUFACTURER'S NAME:** MWV  
**ADDRESS:** 501 South 5th Street Richmond VA 23112-0501  
**EMERGENCY PHONE:** (800) 424-9300 (CHEMTREC)  
**BUSINESS PHONE:** (804) 444-1000 (8 am – 5 pm ET M-F)

### 2. Hazard(s) Identification

**Signal Word(s):** **WARNING**

**NOTE:** This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous as the result of downstream activities (e.g. cutting, processing) that reduces its particle size resulting in potential hazards as described below.

Product Classification	Hazard Statement(s)	Pictogram
Combustible Dust (OSHA Defined Hazard)	If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air	None

#### **Precautionary Statement(s):**

**Prevention Statements:** Caution should be taken in the processing, shipping, handling and use of these materials, particularly if they are in a dry state and dust is produced. Keep away from sparks, flame or other heat sources and take precautionary measures against static discharge.

**Response Statements:** Not applicable.

**Ingredients of Unknown Acute Toxicity (>1%):** NA

### 3. Composition/Information on Ingredients

Component	CAS#	EC#	Wt %
Cellulose	65996-61-4	265-995-8	87 – 93
Starch	9005-25-8	232-679-6	1 – 5

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## 4. First Aid Measures

**Ingestion:** Not likely to occur for product during normal use.

**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.

**Skin Contact:** Not anticipated for product in purchased form, wash with mild soap and water.

**Skin Absorption:** Product is not absorbed through the skin.

**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.

**Note to Physician:** No special advice, treat symptomatically.

Acute Symptoms/Effects- Cellulose dust can cause eye irritation and obstruction in the nasal passages.

Delayed Symptoms/Effects – No delayed effects expected.

## 5. Fire-Fighting Measures

**Extinguishing Media:** Use water, dry chemical, carbon dioxide or foam as appropriate for surrounding fire.

**Specific Hazards, Anticipated Combustion Products:** Combustion products include carbon monoxide, carbon dioxide and fine particulate in the form of smoke.

**Autoignition Temperature:** 450°F (233 °C).

**Special Firefighting Procedures:** As in any fire, wear NIOSH-approved self contained breathing apparatus and appropriate protective clothing.

**Unusual Fire and Explosion Hazards:** Paperboard processing may result in the release of cellulose fibers. Paperboard as supplied and shipped is highly unlikely to release sufficient dust to constitute a combustible dust explosion hazard. 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 similarly deflagrate (combustion without detonation like a supersonic explosion) if ignited in an open or loosely contained area. Cellulose dust explosibility: ( $K_{st}$  dry = >200 and < 300 bar m/s). Caution should be taken in the processing, shipping, handling and use of these materials, particularly if they are in a dry state and dust is produced. Reference NFPA standards 654, 69 and the NFPA *Fire Protection Handbook* for guidance.

\* $K_{st}$  the maximum rate of pressure rise is used to calculate the  $K_{st}$  value; an internationally recognized index used to classify dust explosibility.

**NFPA Rating (Scale 0-4):**      **Health = 0**      **Fire = 1**      **Reactivity = 0**

## 6. Accidental Release Measures

**Steps to be Taken In Case Material Is Released or Spilled:** Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of cellulose 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.

Other Precautions: Minimize compressed air blowdown or other practices that generate high dust levels.

## 7. Handling and Storage

**Precautions to be Taken In Handling and Storage:** Minimize dust generation and accumulation. Keep in cool, dry place away from open flame and other sources of ignition. Maintain good housekeeping to avoid accumulation of cellulose dust on exposed surfaces. Cellulose dust may pose a combustible dust hazard.

Because of the size of the rolls, physical hazards are the predominant hazards. Safety shoes should be worn when moving rolls by hand or hand tools. Rolls should be stored on flat, clean and even surfaces to prevent tipping over. All product material should be stored away from open flames.

## 8. Exposure Control Measures/Personal Protection

### Exposure Limits/Guidelines:

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Cellulose	65996-61-4	65 - 85	OSHA	PEL-TWA 15 mg/m <sup>3</sup> (PNOR) <sup>1</sup>	Total dust
			OSHA	PEL-TWA 5 mg/m <sup>3</sup> (PNOR) <sup>1</sup>	Respirable dust
			ACGIH	TLV <sup>®</sup> -TWA 10 mg/m <sup>3</sup> Cellulose	Total dust
Starch	9005-25-8	1 – 5	OSHA	PEL-TWA 15 mg/m <sup>3</sup>	Total dust
			OSHA	PEL-TWA 5 mg/m <sup>3</sup>	Respirable dust fraction
			ACGIH	TLV <sup>®</sup> -TWA 10 mg/m <sup>3</sup>	Total dust

<sup>1</sup>OSHA particulate not otherwise regulated (PNOR)

### Personal Protective Equipment:

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

**PROTECTIVE GLOVES** – Not required. However, 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 irritation may occur.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT** – Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

**WORK/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.

### Ventilation:

**LOCAL EXHAUST** – 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. See “SPECIAL” section below.

**MECHANICAL (GENERAL)** – Provide general ventilation in processing and storage areas so that exposure limits are met.

## 8. Exposure Control Measures/Personal Protection (cont'd.)

SPECIAL – 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.

## 9. Physical/Chemical Properties

<b>Physical Appearance:</b>	Red or brown paper rolls or sheets
<b>Boiling Point (@ 760 mm Hg):</b>	Not applicable
<b>Evaporation Rate (Butyl Acetate = 1):</b>	Not applicable
<b>Freezing:</b>	Not applicable
<b>Melting Point:</b>	Not applicable
<b>Flash Point:</b>	Not available
<b>Flammability:</b>	Not available
<b>Auto-ignition Temperature:</b>	450°F (233 °C)
<b>Lower / Upper Explosive Limits:</b>	See section 5 above
<b>Decomposition Temperature:</b>	Not available
<b>Solubility in Water (% by weight):</b>	Not available
<b>Odor Threshold:</b>	Not available
<b>Vapor Density (air = 1; 1 atm):</b>	Not applicable
<b>Vapor Pressure (mm Hg):</b>	Not applicable
<b>Viscosity:</b>	Not applicable
<b>% Volatile by Volume (@ 70°F (21°C)):</b>	Not applicable
<b>Oil-Water Distribution Coefficient:</b>	Not applicable
<b>pH:</b>	Not applicable

## 10. Stability and Reactivity

**Stability:**      Unstable            Stable

**Conditions to Avoid:** Avoid open flame, sparks and other sources of ignition.

**Incompatibility (Materials to Avoid):** Not applicable.

**Hazardous Decomposition or By-Products:** Combustion products include carbon monoxide, carbon dioxide and fine particulate in the form of smoke.

**Hazardous Polymerization:**      May occur            Will not occur

**Sensitivity to Mechanical Impact:** Not applicable

**Sensitivity to Static Discharge:** Not applicable

## 11. Toxicological Information

### Likely Route(s) of Exposure:

Inhalation and eyes.

### Signs and Symptoms of Exposure:

**Acute Health Hazards:** Not applicable for product in purchased form. Dust may be a mechanical irritant to the eyes and cause obstruction in the nasal passages.

**Chronic Health Hazards:** Cellulose (pulp) dust has not been shown to produce significant disease or toxic effects when exposure limits are met. Cellulose is poorly soluble and has a low order of toxicity.

**Carcinogenicity Listing(s) (NTP, IARC, OSHA):** None

**Toxicity Data:** No specific information available for product in purchased form. Individual component information is listed below.

### Components:

**Cellulose:** LC<sub>50</sub> (rats, inhalation) = 5,800 mg/m<sup>3</sup>/4 hours

## 11. Toxicological Information (cont.)

**Skin Corrosion/Irritation:** Data are not available.  
**Serious Eye Damage/Irritation:** Data are not available.  
**Respiratory or Skin Sensitization:** Data are not available.  
**Aspiration Hazard:** Not applicable.  
**Reproductive effects:** Data are not available.  
**Teratogenic effects:** Data are not available  
**Mutagenic effects:** Data are not available.  
**Target Organs:** Eyes and respiratory system.

## 12. Ecological Information

**Environmental Fate:** Cellulose fiber slowly biodegrades in water (half life range 1mo – 1 yr in freshwater and coastal seawater). Cellulose fiber persists in arid soil (landfills).  
**Environmental Toxicity:** Not available.

## 13. Disposal Considerations

**Waste Disposal Method:** Recycling centers are available in nearly every major and most small cities within the US and Canada that can take waste at no charge. If not recycled, and disposed of or discarded in its purchased form, incineration or dry land disposal is acceptable in most jurisdictions. Follow all applicable federal, state, provincial and local regulations. It is the user's responsibility to determine proper disposal methods.

## 14. Transport Information

Mode: (Air, Land, water) Not regulated as a hazardous material by the U.S. Department of Transportation. Not listed as a hazardous material in Canadian Transportation of Dangerous Goods (TDG) regulations. Not listed as a hazardous material for IATA, and IMDG.

<b>Proper Shipping Name:</b>	Not applicable
<b>Hazard Class:</b>	Not applicable
<b>UN/NA ID Number:</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>DOT labels required:</b>	Not applicable

## 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.

**OSHA:** This product, as shipped, is not regulated as a OSHA hazardous chemical, however, cellulose dust is a regulated combustible hazard under the OSHA Hazard Communication Standard [29 CFR 1910.1200] when it becomes mechanically processed and airborne.

**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:** This product has been reviewed according the EPA "Hazard Categories: promulgated under SARA Title III, Sections 311 and 312 and is considered, under applicable definitions, to meet the following categories:

## 15. Regulatory Information (cont.)

An immediate (acute) health hazard	No
A delayed (chronic) health hazard	No
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

**CALIFORNIA P65: This product does not require a warning under California Proposition 65..**

## 16. Other Information

**Date Prepared:** 05/30/2015

**Date Revised:** Not applicable

**Prepared By:** MWV Product Stewardship Group.

**MWV SDS available on:** [www.mwv.com](http://www.mwv.com)

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### Definition of Common Terms:

ACGIH<sup>®</sup> = American Conference of Governmental Industrial Hygienists

CAS# = Chemical Abstracts System Number

DOT = U. S. Department of Transportation

EC# = European Commission Number

EPA = U.S. Environmental Protection Agency

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LC50 = Concentration in Air Resulting in Death To 50% of Experimental Animals

LD50 = Administered Dose Resulting in Death to 50% of Experimental Animals

LEL = Lower Explosive Limit

LFL = Lower Flammable Limit

NIOSH = National Institute for Occupational Safety and Health

NFPA = National Fire Protection Association

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit

PNOR = Particulate Not Otherwise Regulated

PNOS = Particulate Not Otherwise Specified

TDG = Canada-Transportation of Dangerous Goods

TLV<sup>®</sup> = Threshold Limit Value

TSCA = Toxic Substance Control Act

TWA = Time-Weighted Average (8 hours)

UFL = Upper Flammable Limit



## **Unbleached Cellulose Paperboard**

*Per 29 CFR § 1910.1200(f)(4)*

# **Warning**

### **May Form Combustible Dust Concentrations in Air**

**If small particles are generated during further processing, handling of these materials**

Keep away from all ignition sources including heat, sparks and flame

**Prevent dust accumulations to minimize explosion hazard**

**Note:** OSHA has not established a pictogram for combustible dust.

**MANUFACTURER'S NAME:** MWV

**ADDRESS:** 501 South 5<sup>th</sup> Street, Richmond, VA

**PHONE:** 1-804-444-1000

**IN CASE OF EMERGENCY:** (800) 424-9300 (USA) CHEMTREC