

**Bleached Kraft Pulp**

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1. Product Identification

Product	Manufacturing Location(s)
Pulp (cellulose)	USA: Columbus, MS; Oglethorpe, GA (Flint River); New Bern, NC; Port Wentworth, GA CANADA: Grande Prairie, AB

Synonyms: Bleached Sulphate Pulp

2. Hazardous Ingredients/Identity Information

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Pulp (cellulose)	65996-61-4	> 99	OSHA OSHA ACGIH	PEL-TWA 15 mg/m ³ PEL-TWA 5 mg/m ³ TLV-TWA 10 mg/m ³	Total dust Respirable dust Total dust

3. Hazard Identification

Appearance and Odor: The product is an odorless, white rolled or baled pulp sheet.

Primary Health Hazards: The primary health hazard posed by this product is thought to be due to exposure to dust.

Primary Route(s) of Exposure:

- ☐ Ingestion:
- ☐ Skin:
- ☒ Inhalation: Dust
- ☒ Eye: Dust

Medical Conditions Generally Aggravated by Exposure: Cellulose dust may aggravate pre-existing respiratory conditions or allergies.

Chronic Health Hazards: Paper (cellulose) dust is a biologically inert dust that has little or no effect on the lungs and does not produce significant organic disease or toxic effect when allowable exposure limits are met.

Carcinogenicity Listing:

- ☐ NTP: Not listed
- ☐ IARC Monographs: Not listed
- ☐ OSHA Regulated: Not listed

4. Emergency and First-Aid Procedures

Ingestion: Not applicable for product in purchased form.

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. Seek medical help if irritation persists.

Skin Contact: Not applicable for product in purchased form.

Skin Absorption: Not applicable for product in purchased form.

Inhalation: Excessive dust concentrations may cause unpleasant deposit or obstruction in the nasal passages. Remove to fresh air. Seek medical help if persistent irritation, severe coughing or breathing difficulty occurs.

Note to Physician: None

5. Fire and Explosion Data

Flash Point (Method Used): NAP

Flammable Limits:

LFL = See below under "Unusual Fire and Explosion Hazards"

UFL = NAP

Extinguishing Media: Water

Autoignition Temperature: 450°F (232°C)

Special Firefighting Procedures: None

Unusual Fire and Explosion Hazards: Depending on moisture content, particle diameter and rate of heating, cellulose dust may explode in the presence of an ignition source. An airborne concentration of 30,000 mg/m³ is often used as the LEL for cellulose pulp.

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: Not applicable for product in purchased form. Sweep or vacuum dust for recovery or disposal. Avoid dusty conditions and provide adequate ventilation. Use NIOSH/MSHA-approved dust respirator and goggles where ventilation is not possible and exposure limits may be exceeded.

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: No special handling precautions are required. Keep in cool, dry place away from open flame and other sources of ignition.

8. Exposure Control Measures, Personal Protection

Personal Protective Equipment:

RESPIRATORY PROTECTION – Not applicable for product in purchased form. A NIOSH/MSHA-approved respirator is recommended when allowable exposure limits may be exceeded.

PROTECTIVE GLOVES – Not required. However, cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation from handling product.

EYE PROTECTION – Not applicable for product in purchased form. However, goggles or safety glasses are recommended if the product is used in such a way as to generate high dust levels.

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

WORK/HYGIENE PRACTICES – Not applicable for product in purchased form.

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

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met.

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

SPECIAL – None

OTHER – None

9. Physical/Chemical Properties

Physical Description: The product is an odorless, white rolled or baled pulp sheet.

Boiling Point (@ 760 mm Hg): NAP

Evaporation Rate (Butyl Acetate = 1): NAP

Freezing Point: NAP

Melting Point: NAP

Molecular Formula: NAP

Molecular Weight: NAP

Oil-water Distribution Coefficient: NAP

Odor Threshold: ND

pH: NAP

Solubility in Water (% by weight): <1.0

Specific Gravity (H₂O = 1): 0.6

Vapor Density (air = 1; 1 atm): NAP

Vapor Pressure (mm Hg): NAP

Viscosity: NAP

% Volatile by Volume [@ 70°F (21°C)]: NAP

10. Stability and Reactivity

Stability: ☐ Unstable ☒ Stable

Conditions to Avoid: NAP

Incompatibility (Materials to Avoid): Avoid open flame, sparks and other sources of ignition.

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: NAP

Sensitivity to Static Discharge: NAP

11. Toxicological Information

Components: NAP

Toxicity Data: Product in purchased form:

Acute toxicity: LD50 (rats, oral) >5000 mg/kg

Human Skin Irritation: Non-irritating. Does not cause sensitization.

Chronic Toxicity: No evidence of mutagenic, reproductive or carcinogenic effects.

Cellulose LC50 (rats, inhalation) = 5,800 mg/m³/4 hours.

Source: *Registry of Toxic Effects of Chemical Substances (RTECS)*, National Institute for Occupational Safety and Health.

Target Organs: Eyes, respiratory system

12. Ecological Information

Environmental Fate: No information available at this time. Material naturally biodegrades when exposed to the environment.

Environmental Toxicity: No information available at this time. A biodegradation product promotes soil fertility and plant growth. No toxic components are used in the manufacture of these materials.

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 paper at no charge. Deposit in a landfill or incinerate in accordance with federal, state and local regulations. Cellulose is not listed under any sections of the Resource Conservation and Recovery Act (RCRA) or Canadian National Pollution Release Inventory (NPRI) Follow all applicable federal, state, provincial and local regulations. It is, however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste.

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.

Proper Shipping Name: NAP

Hazard Class: NAP

UN/NA ID Number: NAP

Packing Group: NAP

Information Reported for Product/Size: NAP

15. Regulatory Information

TSCA: All ingredients are on the TSCA inventory.

CERCLA: NAP

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

EINECS: All ingredients are listed on the European Inventory of Existing Commercial Chemical Substances or European List of Notified Chemical substances.

ENCS: Cellulose (pulp) is not listed or is exempt from the Japanese Existing and New Chemical Substances List as regulated by the Ministry of International Trade and Industry.

AICS: All ingredients are listed on the Australian Inventory of Chemical Substances.

KECL: All ingredients are listed on the South Korean Existing Chemicals List.

OSHA: OSHA Hazard Communication Standard [29 CFR 1910.1200].

STATE RIGHT-TO-KNOW:

California Prop 65 – This product does not contain any substances listed under California Prop. 65.

New Jersey – This product does not contain any substances listed by the state of New Jersey.

Pennsylvania – This product contains cellulose, a substance listed by the state of Pennsylvania.

SARA 313 Information: To the best of our knowledge, this product contains no chemical subject to SARA Title II Section 313 supplier notification requirements.

SARA 311/312 Hazard Category: This product has been reviewed according to 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'd.)

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

FDA: Meets FDA requirements for direct food contact.

WHMIS Classification: Not a controlled product.

16. Additional Information

Date Prepared: 01/15/1988

Date Revised: 05/07/2007

Prepared By: Weyerhaeuser Company Corporate Environment, Health & Safety

Weyerhaeuser MSDS available on: <http://www.weyerhaeuser.com/environment/msds/default.asp>

User's Responsibility: The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure that this MSDS is the most up-to-date issue.

Definition of Common Terms:

ACGIH	= American Conference of Governmental Industrial Hygienists
AICS	= Australian Inventory of Chemical Substances
C	= Ceiling Limit
CAS#	= Chemical Abstracts System Number
DOT	= U. S. Department of Transportation
DSL	= Domestic Substance List
EC50	= Effective concentration that inhibits the endpoint to 50% of control population
EINECS	= European Inventory of Existing Commercial Chemical Substances or European List of Notified Chemical Substances
ENCS	= Japanese Existing and New Chemical Substances List
EPA	= U.S. Environmental Protection Agency
IARC	= International Agency for Research on Cancer
IATA	= International Air Transport Association
IMDG	= International Maritime Dangerous Goods
KECL	= South Korean Existing Chemicals List
LC50	= Concentration in air resulting in death to 50% of experimental animals
LCLo	= Lowest concentration in air resulting in death
LD50	= Administered dose resulting in death to 50% of experimental animals
LDLo	= Lowest dose resulting in death
LEL	= Lower Explosive Limit
LFL	= Lower Flammable Limit
MSHA	= Mine Safety and Health Administration
NAP	= Not Applicable
NAV	= Not Available
NIOSH	= National Institute for Occupational Safety and Health
NPRI	= Canadian National Pollution Release Inventory
NTP	= National Toxicology Program

16. Additional Information (cont'd.)

OSHA	= Occupational Safety and Health Administration
PEL	= Permissible Exposure Limit
RCRA	= Resource Conservation and Recovery Act
STEL	= Short-Term Exposure Limit (15 minutes)
STP	= Standard Temperature and Pressure
TCLo	= Lowest concentration in air resulting in a toxic effect
TDG	= Canadian Transportation of Dangerous Goods
TDLo	= Lowest dose resulting in a toxic effect
TLV	= Threshold Limit Value
TSCA	= Toxic Substance Control Act
TWA	= Time-Weighted Average (8 hours)
UFL	= Upper Flammable Limit
WHMIS	= Workplace Hazardous Materials Information System