Coated Paper

SAFETY DATA SHEET (SDS)

1. Identification

TRADE NAME: Coated Commercial Printing Papers

SYNONYMS: Coated Paper (ResoluteMax 84, ResoluteBrite 80, ResoluteBrite 76, ResoluteGloss

CHEMICAL NAME: Cellulose / Lignin (paper)

Recommended Uses: Magazines, Catalogs, Inserts/flyers/circulars, Annual reports, General commercial printing, Coupons, Direct mail, Billing statements, Bill stuffers, Books, Manuals, Brochures, Financial documents, Placemats, Newsletters, Transactional printing: statements, invoices, reports, Direct mail: credit card solicitations, non-profit mailings, Mass market and premium paperbacks, Tradebooks, Coloring books, Puzzle books, Hardcover books, Educational workbooks, Business and telephone directories, Workbooks,

Manufacturer: Resolute FP US Inc.

Site address: 5300 Cureton Ferry Road
Catawba, South Carolina
29704 USA

Contact, for emergencies: Call CHEMTREC
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887

Contact, for product information: 1-803-817-4670

2. Hazards Identification

Classification (hazard class and category):

Under the US 29 CFR 1910.1200, this product is not hazardous in the form in which it is shipped by Manufacturer but may become hazardous by downstream activities (e.g., grinding, sanding, pulverizing) that reduce its particle size. Those potential hazards created by downstream activities are described below.

Product Classification[1]	Hazard Statement(s)	Signal Word	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	Warning	None

[1] Under the Canadian Hazardous Products Regulations (HPR), with respect to combustible dusts classification, HPR would only regulate products that are sold in dust form and not products that are in a solid form at the time of sale or importation which might produce dust when used in a workplace.

Precautionary Statement(s):

Prevention Statements: Caution should be taken in the processing, shipping, handling and use of this material, particularly if it is in a dry state and dust is produced.

Response Statements: Not applicable

Storage Statements: See section 7 of the SDS

3. Composition/Information on Ingredients

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities (e.g., grinding, sanding, pulverizing) that reduce its particle size.

Ingredients (chemical name)	CAS Number	Wt %
Cellulose $(C_6H_{10}O_5)_n$	65996-61-4	0-80
Lignin	--	0-50
Latex (Polymer)	--	0-4
Starch $(C_6H_{10}O_5)$	9005-25-8	1-3
Kaolin (Clay)	1332-58-7	20-30
Titanium dioxide (TiO_2)	13463-67-7	0-3.8

4. First Aid Measures

Inhalation First Aid: 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.

Skin Contact First Aid: Not applicable for product in purchased form.

Eye Contact First Aid: 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.

Ingestion First Aid: Not applicable under normal use.

Most Important Symptoms and Effects

Acute: Paper dust may cause eye irritation and obstruction in the nasal passages.

Delayed: Not applicable under normal use.

5. Fire Fighting Measures

Extinguishing Media and Restrictions: Water or other extinguishing agents appropriate for fighting surrounding fires.

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

Autoignition Temperature: 450°F (232°C).

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

Unusual Fire and Explosion Hazards: Paper processing (e.g. fiberization) may result in the release of cellulose fibers. Paper rolls as supplied and shipped is highly unlikely to release sufficient paper 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 paper dust may ignite and burn with explosive force in a contained area. Paper dust may similarly deflagrate (combustion without detonation like a supersonic explosion) if ignited in an open or loosely contained area. Paper / Cellulose dust explosibility: (*Kst 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.

*Kst the maximum rate of pressure rise is used to calculate the Kst value; an internationally recognized index used to classify dust explosibility.

6. Accidental Release Measures

Always dispose of waste materials in accordance with all Federal, Provincial/State and Local regulations.

Personal Precautions, Protective Equipment and Emergency Procedures:

Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of paper dust on exposed surfaces. Use 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.

Environmental Precautions: See local requirement.

Methods and Material for Spill Containment/Clean-Up (procedures, methods, materials): Not applicable.

7. Handling and Storage

Precautions for Safe Handling: 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 dried paper dust on exposed surfaces. Paper dust may pose a combustible dust hazard.

8. Exposure Controls/Personal Protection

Control Parameters

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities (e.g., grinding, sanding, pulverizing) that reduce its particle size.

Ingredients	CAS Number	Dust fraction	ACGIH TLV-TWA	NIOSH REL-TWA	OSHA PEL-TWA
Cellulose $(C_6H_{10}O_5)_n$	9004-34-6 Cellulose, microcrystalline	Total dust	10 mg/m^3	10 mg/m^3	15 mg/m^3
		Respirable fraction	--	5 mg/m^3	5 mg/m^3
Calcium Carbonate ($CaCO_3$)	471-34-1	Total dust	10 mg/m^3	10 mg/m^3	15 mg/m^3
		Respirable fraction	3 mg/m^3	5 mg/m^3	5 mg/m^3
Starch $(C_6H_{10}O_5)$	9005-25-8	Total dust	10 mg/m^3	10 mg/m^3	15 mg/m^3
		Respirable fraction	3 mg/m^3	5 mg/m^3	5 mg/m^3
Kaolin (Clay)	1332-58-7	Total dust	2 mg/m^3 (no asbestos and <1% crystalline silica)	10 mg/m^3	15 mg/m^3
		Respirable fraction	--	5 mg/m^3	5 mg/m^3
Titanium Dioxide[(1)]	13463-67-7	Total dust	10 mg/m^3	2.4 mg/m^3 (fine)	15 mg/m^3
		Respirable fraction	3 mg/m^3	0.3 mg/m^3 (ultrafine)	--

Key to abbreviations:

ACGIH: American Conference of Governmental Industrial Hygiene
NIOSH: National Institute of Occupational Health and Safety
OSHA: Occupational Safety and Health Administration, 29 CFR 1910.1000 Table Z-1
TWA: Time Weighted Averages are based on 8h/day or 10h/day, 40h/week exposures
TLV: Threshold Limit Value
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit
[(1)] **IARC**: International Agency for Research on Cancer: Titanium dioxide - 2B: Possibly carcinogenic to humans

Exposure Controls

Engineering Measures/ Controls:

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met. 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 paper dust within the system. See “SPECIAL” section below.

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

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.

Other Engineering Controls: None required.

Personal Protective Equipment:

RESPIRATORY PROTECTION – Use filtering facepiece 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.

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.

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

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 paper dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

9. Physical and Chemical Properties

Appearance/Form: Solid in rolled form
Color: White
Odor: Odorless
Odor threshold: Not available
Solubility in water: Insoluble
pH: Not applicable
Melting/freezing point: Not applicable
Initial boiling point and range: Not applicable
Flash point: Not available
Upper/lower flammability/explosive limits: Not available
% Volatiles by volume at 21°C/70°F: Not available
Octanol/water partition coefficient: Not available
Flammability (gas/solid): Not available
Auto-ignition temperature: 450°F (232°C)
Decomposition temperature: Not available
Vapor pressure (mm Hg): Not applicable
Vapor density (air = 1): Not applicable
Evaporation Rate (BuAc=1): Not applicable
Viscosity: Not available
Specific gravity/bulk density: Not applicable
Relative density: Not applicable

10. Stability and Reactivity

Reactivity: Not applicable
Hazardous Polymerization: Will not occur
Stability: Stable
Conditions to Avoid: Not applicable
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.
Sensitivity to Static Discharge: Not applicable

11. Toxicological Information

Routes of Entry: Eye contact and inhalation
Signs and Symptoms of Exposure:
Acute Health Hazards: Not applicable for product in purchased form. Dust may be a mechanical irritant to the eyes.
Chronic Health Hazards: Cellulose / Lignin (paper) dust has not been shown to produce significant disease or toxic effects when exposure limits are met. Cellulose /Lignin (paper) is poorly soluble and has a low order of toxicity.
Carcinogenicity Listing: Titanium dioxide: Classified by IARC 2B: Possibly carcinogenic to humans
Toxicity Data:
Cellulose: LC_{50} (rats, inhalation) = 5 800 mg/m^3 /4 hours.
Calcium carbonate: LD_{50} (rat, oral) = 6 450 mg/kg
Skin Corrosion/Irritation: Data is not available.
Serious Eye Damage/Irritation: Data is not available.

Respiratory or Skin Sensitization: Data is not available.
Aspiration Hazard: Data is not available.
Reproductive effects: Data is not available.
Teratogenic effects: Data is not available.
Mutagenic effects: Data is not available.
Target Organs: Eyes and respiratory system.

12. Ecological Information*

The content of this section is not enforced under the United States Regulations 29 CFR 1910.1200 – Hazard Communication Standard (HCS) and the Canadian Hazardous Products Regulations (HPR), because it falls outside of its jurisdiction.

13. Disposal Considerations*

The content of this section is not enforced under the United States Regulations 29 CFR 1910.1200 – Hazard Communication Standard (HCS) and the Canadian Hazardous Products Regulations (HPR), because it falls outside of its jurisdiction.

14. Transport Information*

The content of this section is not enforced under the United States Regulations 29 CFR 1910.1200 – Hazard Communication Standard (HCS) and the Canadian Hazardous Products Regulations (HPR), because it falls outside of its jurisdiction.

15. Regulatory Information*

The content of this section is not enforced under the United States Regulations 29 CFR 1910.1200 – Hazard Communication Standard (HCS) and the Canadian Hazardous Products Regulations (HPR), because it falls outside of its jurisdiction.

16. Other Information

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Date Revised: 18/01/2016

Prepared by: Resolute Forest Products, Head office

Disclaimer:
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Label

COATED PAPER

PRODUCT IDENTIFIER
Coated Commercial Printing Papers

MANUFACTURER
Resolute FP US Inc.
5300 Cureton Ferry Road
Catawba, South Carolina
29704 USA

EMERGENCY CONTACT

CHEMTREC
Within USA and Canada: 1-800-424-9300 or 1-703-527-3887

HAZARD STATEMENT
Under the US 29 CFR 1910.1200, this product is not hazardous in the form in which it is shipped by Manufacter but may become hazardous by downstream activities. If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air.

PRECAUTIONARY STATEMENTS
Caution should be taken in the processing, shipping, handling and use of this material, particularly if it is in a dry state and dust is produced.

Minimize dust generation and accumulation. Maintain good housekeeping to avoid accumulation of dried cellulose dust on exposed surfaces. Cellulose dust may pose a paper dust hazard.

HAZARD PICTOGRAMS
None

SIGNAL WORD
Warning

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