SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Uncoated Printing, Converting and Imaging Papers

Intended Use of the Product

Printing, converting and imaging papers applications

Name, Address, and Telephone of the Responsible Party

Company
International Paper
6400 Poplar Avenue
Memphis, TN 38197
Tel.: 901-419-4848

Emergency Telephone Number

Emergency Number: 1-800-424-9300 (North America)/ 1-703-527-3887 (International)

CHEMTREC – TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

SECTION 2: HAZARDS IDENTIFICATION

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., slitting, cutting, pulverizing) that reduce its particle size. Those hazards are described below.

Classification of the Substance or Mixture

Combustible Dust

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Other Hazards

Exposure to dust from further processing this product may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) : Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulose pulp</td>
<td>(CAS No) 65996-61-4</td>
<td>70 - 90</td>
</tr>
<tr>
<td>Limestone</td>
<td>(CAS No) 1317-65-3</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10, 10 - 20</td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1)</td>
<td>(CAS No) 471-34-1</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10, 10 - 20</td>
</tr>
<tr>
<td>Starch</td>
<td>(CAS No) 9005-25-8</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10</td>
</tr>
<tr>
<td>Starch, acid-hydrolyzed</td>
<td>(CAS No) 65996-63-6</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10</td>
</tr>
<tr>
<td>Starch, oxidized</td>
<td>(CAS No) 65996-62-5</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10</td>
</tr>
<tr>
<td>Starch, 2-hydroxyethyl ether</td>
<td>(CAS No) 9005-27-0</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10</td>
</tr>
<tr>
<td>Amylopectin, tetrahydrogen triphosphate, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride, sodium salt</td>
<td>(CAS No) 112484-42-1</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10</td>
</tr>
<tr>
<td>Starch, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride</td>
<td>(CAS No) 56780-58-6</td>
<td>&lt; 0.1, 0.1 - 1, 1 - 5, 5 - 10</td>
</tr>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td>3 - 7</td>
</tr>
<tr>
<td>Sulfuric acid, aluminum salt (3:2)</td>
<td>(CAS No) 10043-01-3</td>
<td>&lt; 0.1, 0.1 - 1</td>
</tr>
</tbody>
</table>
More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

**SECTION 4: FIRST AID MEASURES**

**Description of First Aid Measures**

**General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

**Inhalation**: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact**: Wash with plenty of soap and water. Obtain medical attention if irritation develops or persists.

**Eye Contact**: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking, or redness persist.

**Ingestion**: Rinse mouth. Do not induce vomiting. Seek medical attention if a large amount is swallowed.

**Most Important Symptoms and Effects Both Acute and Delayed**

**General**: Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation**: Dust from this product may cause irritation to the respiratory tract.

**Skin Contact**: Prolonged contact with large amounts of dust may cause mechanical irritation.

**Eye Contact**: Eye contact with large amounts of dust may cause mechanical irritation.

**Ingestion**: If a large quantity has been ingested:

- May cause gastrointestinal irritation.

**Chronic Symptoms**: None expected under normal conditions of use.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

If you feel unwell, seek medical advice.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media**: Dry chemical, carbon dioxide, alcohol-resistant foam, water spray.

**Unsuitable Extinguishing Media**: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Special Hazards Arising From the Substance or Mixture**

**Fire Hazard**: May form combustible dust when processed.

**Explosion Hazard**: When processed may cause dust explosion hazard in air. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

**Reactivity**: Hazardous reactions will not occur under normal conditions.

**Advice for Firefighters**

**Precautionary Measures Fire**: Exercise caution when fighting any paper fire.

**Firefighting Instructions**: Use water spray or fog for cooling exposed product.

**Protection During Firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection.


**Reference to Other Sections**

Refer to section 9 for flammability properties.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures**: Avoid unnecessary contact with dust on skin, eyes, or clothing. Avoid breathing (dust). Avoid creating dusty conditions whenever feasible.

**For Non-Emergency Personnel**

**Protective Equipment**: Use appropriate personal protection equipment (PPE).

**Emergency Procedures**: Evacuate unnecessary personnel.

**For Emergency Personnel**

**Protective Equipment**: Equip cleanup crew with proper protection.

**Emergency Procedures**: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

**Environmental Precautions**

Prevent entry to sewers and public waters.

**Methods and Material for Containment and Cleaning Up**

**For Containment**: Contain and collect as any solid.
Methods for Cleaning Up: For dust use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Avoid generation of dust during clean-up of spills. Contact competent authorities after a spill.

Reference to Other Sections
See Heading 8. Exposure controls and personal protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling
Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, lighting, ventilating equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, incompatible materials, heat, hot surfaces, sparks, open flames, and other ignition sources.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Specific End Use(s)
Printing, converting and imaging papers applications

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

<table>
<thead>
<tr>
<th>Limestone (1317-65-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Mexico</td>
<td>OEL STEL (mg/m³)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>British Columbia</td>
<td>OEL STEL (mg/m³)</td>
</tr>
<tr>
<td>British Columbia</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Québec</td>
<td>VEMP (mg/m³)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL STEL (mg/m³)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL STEL (mg/m³)</td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1) (471-34-1)</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL TWA (mg/m³)</td>
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<tr>
<td>Northwest Territories</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Québec</td>
<td>VEMP (mg/m³)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL STEL (mg/m³)</td>
</tr>
</tbody>
</table>
Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Avoid creating or spreading dust. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Not applicable for product in purchased form. Safety glasses. Dust formation: dust mask.

**Materials for Protective Clothing:** Not required for normal conditions of use.

**Hand Protection:** Not required for normal conditions of use.

**Eye Protection:** In case of excessive dust production, safety goggles are recommended.

**Skin and Body Protection:** Not required for normal conditions of use.

**Respiratory Protection:** Use NIOSH-approved dust mask if dust has the potential to become airborne.

**Environmental Exposure Controls:** For solid product or dust do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Information on Basic Physical and Chemical Properties**

| Physical State | Solid |
| Appearance | Not available |
| Odor | Not available |
| Odor Threshold | Not available |
| pH | Not available |
| Evaporation Rate | Not available |
| Melting Point | Not available |
| Freezing Point | Not available |
| Boiling Point | Not available |
Uncoated Printing, Converting and Imaging Papers

Safety Data Sheet

Flash Point: Not available
Auto-ignition Temperature: Not available
Decomposition Temperature: Not available
Flammability (solid, gas): Not available
Lower Flammable Limit: Not available
Upper Flammable Limit: Not available
Vapor Pressure: Not available
Relative Vapor Density at 20 °C: Not available
Relative Density: Not available
Specific Gravity: Not available
Solubility: Not available
Partition Coefficient: N-Octanol/Water: Not available
Viscosity: Not available

Explosive Properties: Dust explosion hazard in air when processed.
Explosion Data – Sensitivity to Mechanical Impact: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge: Static discharge could act as an ignition source if dust is dispersed in air.

SECTION 10: STABILITY AND REACTIVITY
Reactivity: Hazardous reactions will not occur under normal conditions.
Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Direct sunlight. Heat, hot surfaces, sparks, open flames, and other ignition sources. Incompatible materials.
Incompatible Materials: Strong acids, strong bases, strong oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION
Information on Toxicological Effects - Product
Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Dust from this product may cause irritation to the respiratory tract.
Symptoms/Injuries After Skin Contact: Prolonged contact with large amounts of dust may cause mechanical irritation. May cause an allergic reaction in sensitive individuals.
Symptoms/Injuries After Eye Contact: Eye contact with large amounts of dust may cause mechanical irritation.
Symptoms/Injuries After Ingestion: If a large quantity has been ingested: Gastrointestinal irritation.
Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 Oral Rat</th>
<th>LC50 Oral Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric acid, aluminum salt (3:2) (10043-01-3)</td>
<td>1930 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1) (471-34-1)</td>
<td>6450 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>
Uncoated Printing, Converting and Imaging Papers

Safety Data Sheet

Starch, 2-hydroxyethyl ether (9005-27-0)
LD50 Oral Rat > 50000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity  No additional information available
Persistence and Degradability  Not available

Bioaccumulative Potential
Carbonic acid, calcium salt (1:1) (471-34-1)
BCF Fish 1 (no bioaccumulation)

Mobility in Soil  Not available

Other Adverse Effects
Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT  Not regulated for transport
In Accordance with IMDG  Not regulated for transport
In Accordance with IATA  Not regulated for transport
In Accordance with TDG  Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations
All ingredients of this product are either listed on the TSCA inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

US State Regulations

Sulfuric acid, aluminum salt (3:2) (10043-01-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Limestone (1317-65-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Starch (9005-25-8)
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

Uncoated Printing, Converting and Imaging Papers
WHMIS Classification  Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.
SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 05/26/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:
- Combustible Dust : May form combustible dust concentrations in air

NFPA Health Hazard : 1 – Dust exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA Fire Hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
- Health : 1 Slight Hazard - Irritation or minor reversible injury possible
- Flammability : 2 Moderate Hazard
- Physical : 0 Minimal Hazard

Party Responsible for the Preparation of This Document
International Paper
6400 Poplar Avenue
Memphis, TN 38197
Tel.: 901-419-4848

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UNCOATED PRINTING, CONVERTING AND IMAGING PAPERS

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Warning