Section 1. Product and Company Identification

Product Group	:	Bleached Cellulose Paperboard
Trade Names or Grades	:	Crescendo® C1S and C2S EnShield®, EnShield® Cup LiquiTech® Aseptic MicroCook® CC, MicroCook® NCC NatraLock® Defend, NatraLock® Face Seal, NatraLock® Resist, NatraLock® Resist+, NatraLock® Protect, NatraLock® Ultra Seal, PharmaLock™ Endurance, PharmaLock™ Easy Seal+ PolarShield™ Canister, PolarShield™ Frozen Cup, PolarShield™ HMR, PolarShield™ Mill Wax, PolarShield™ Ovenable, PolarShield™ PET PrintKote®, PrintKote® Foamboard, PrintKote® HC, PrintKote® Litholam, PrintKote® LC, PrintKote® Lottery, PrintKote® Poly, PrintKote® Release, PrintKote® PET Promina®, Promina® Innerframe, Promina® Lux, Promina® Outer Carton, Promina® Style, Tobacco Basic Reliant™, Reliant® Lottery Tango® C1S and C2S, Tango® Gift Card, Tango® Poly, Tango® Digital C1S and C2S TruFold™ TruServ® Coated Platestock, TruServ® Coated Platestock Deep Well, TruServ® Compostable Cupstock, TruServ® Cupstock, TruServ® Poly Cupstock, TruServ® Pressed Tray, TruServ® Uncoated Platestock
Synonyms	:	Solid Bleached Paperboard
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	:	White or dyed 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	:	450ºF (233 ºC), 645°F (341°C) for polyolefins
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	:	May 5, 2016
Date Revised	:	April 22, 2022
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
LC_{50}	=	Concentration in air resulting in death to 50% of experimental animals

LC_{Lo}	=	Lowest concentration in air resulting in death
LD_{50}	=	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: **Bleached Cellulose Paperboard**

Trade Names or Grades:

Crescendo® C1S and C2S, EnShield®, EnShield® Cup, LiquiTech® Aseptic, MicroCook® CC, MicroCook® NCC, NatraLock® Defend, NatraLock® Face Seal, NatraLock® Resist, NatraLock® Resist+, NatraLock® Protect, NatraLock® Ultra Seal, PharmaLock™ Endurance, PharmaLock™ Easy Seal+, PolarShield™ Canister, PolarShield™ Frozen Cup, PolarShield™ HMR, PolarShield™ Mill Wax, PolarShield™ Ovenable, PolarShield™ PET, PrintKote®, PrintKote® Foamboard, PrintKote® HC, PrintKote® Litholam, PrintKote® LC, PrintKote® Lottery, PrintKote® Poly, PrintKote® Release, PrintKote® PET, Promina®, Promina® Innerframe, Promina® Lux, Promina® Outer Carton, Promina® Style, Tobacco Basic, Reliant™, Reliant® Lottery, Tango® C1S and C2S, Tango® Gift Card, Tango® Poly, Tango® Digital C1S and C2S, TruFold™, TruServ® Coated Platestock, TruServ® Coated Platestock Deep Well, TruServ® Compostable Cupstock, TruServ® Cupstock, TruServ® Poly Cupstock, TruServ® Pressed Tray, TruServ® Uncoated Platestock

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 (CHEMTREC)

Corrugated Sheet

Safety Data Sheet

Revision Date: 05/26/2015 Date of issue: 05/26/2015 Version: 1.1

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Corrugated Sheet

Intended Use of the Product

No use is specified

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

Classification (GHS-US)

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

Name	Product Identifier	% (w/w)
Cellulose pulp	(CAS No) 65996-61-4	95 - 99
Starch, base-hydrolyzed, borated	(CAS No) 69898-30-2	1 - 4

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.

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: When processed: dust from this product may cause irritation to the respiratory tract.

Skin Contact: When processed: prolonged contact with large amounts of dust may cause mechanical irritation.

Eye Contact: When processed: 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 create 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.

Hazardous Combustion Products: Carbon oxides (CO, CO_2).

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: Oxidizers.

Specific End Use(s)

No use is specified

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

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

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
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: Oxidizers.

Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO_2).

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.

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 may cause gastrointestinal irritation.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity No additional information available.

Persistence and Degradability Not available

Bioaccumulative Potential Not available

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.

Ecology – Waste Materials: Avoid release to the environment.

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

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

Corrugated Sheet	
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.

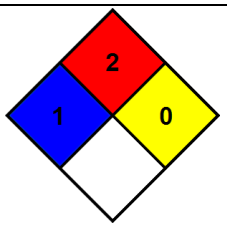
GHS Full Text Phrases:

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

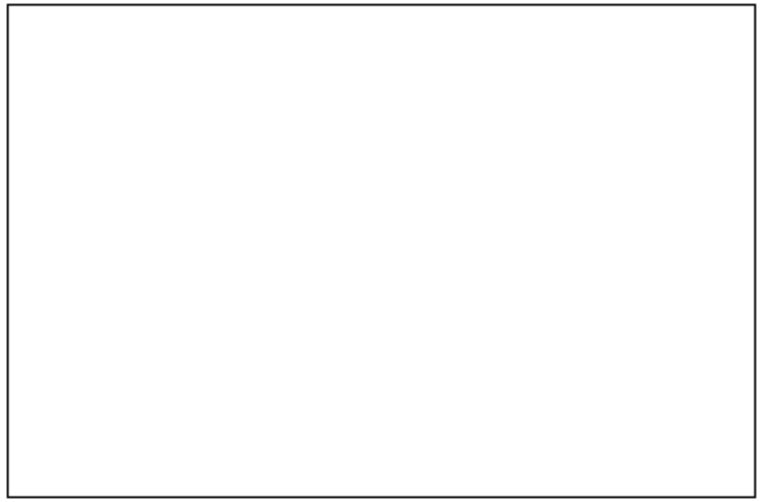
Party Responsible for the Preparation of This Document

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

The information set forth herein is offered as a service to International Paper customers and is not intended to relieve a customer from its responsibility to determine the suitability of this information for their particular purposes, to comply with all laws and procedures regarding the safe use of these materials, and to use these materials in a safe manner.

CORRUGATED SHEET

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



Warning

INTERNATIONAL PAPER

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

Emergency number : 1-800-424-9300 (North America)/ 1-703-527-3887 (International)
CHEMTREC – TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

STERLING WATER TECHNOLOGIES LLC
MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: CP 734

Recommended use of the chemical and restrictions on use: Water treatment chemical

Manufacturer: Sterling Water Technologies LLC
114 W. Seventh Street, Suite 3
Columbia, TN 38401
Telephone: (800) 426-2428

Emergency Phone: **CHEMTREC: (800) 424-9300**

SDS Date of Preparation: 08/02/07
Prepared by: Denese A. Deeds, CIH Industrial Health & Safety Consultants, Inc. Woodbridge, CT 203-929-3473

2. HAZARDS IDENTIFICATION

GHS Classification:

Physical	Health	Environment
Not hazardous	Not hazardous	Not hazardous

GHS Label Elements:

None Required

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Inorganic Phosphates	Proprietary	30-50%
Water	7732-18-5	50-70%

4. FIRST AID MEASURES

Eye: Immediately flush victim's eyes with large quantities of water, holding the eyelids apart. Get medical attention if irritation occurs and persists.
Skin: Wash skin thoroughly with soap and water. Get medical attention if irritation develops. Remove and launder clothing before re-use.
Ingestion: Do not induce vomiting. Rinse mouth with water and give one glass of water to drink. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.
Inhalation: Remove victim to fresh air. If breathing is difficult or irritation persists, Get medical attention**.**

Most important Symptoms: May cause slight eye and skin irritation.

Indication of immediate medical attention/special treatment: None indicated.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use media appropriate for surrounding fire. Cool fire exposed containers and structures with water.
Specific hazards arising from the chemical: Thermal decomposition may yield oxides of sodium and phosphorus.
Special Protective Equipment and Precautions for Fire-Fighting Instructions: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.
Explosion Data (sensitivity to mechanical impact or static discharge): None known.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Evacuate spill area and keep unprotected personnel away. Wear appropriate protective clothing as described in Section 8.

Methods and Materials for Containment and Cleaning Up: Dike and collect liquid or absorb with an inert absorbent and place in appropriate containers for disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with the eyes. Avoid prolonged or repeated skin contact. Avoid breathing mists or aerosols. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Do not reuse containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, dry, well ventilated area away from incompatible materials. Protect from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Inorganic Phosphates	None Established

Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.
Respiratory Protection: In operations where exposure levels are exceeded, a NIOSH approved respirator with dust/mist cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.
Skin Protection: Wear impervious gloves such as rubber or neoprene if needed to avoid prolonged skin contact.
Eye Protection: Safety goggles recommended.
Other: Long-sleeved clothing and long pants recommended to avoid prolonged skin contact. Suitable washing facilities should be available in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: Clear to slightly turbid, viscous, opaque liquid with a characteristic odor.

Physical State: Liquid	**Odor Threshold:** Not established
Vapor Density: Same as water	**Initial Boiling Point/Range:** >100°C
Solubility In Water: Soluble	**Vapor Pressure:** Same as water
Relative Density: 1.33-1.47	**Evaporation Rate:** Same as water
Melting/Freezing Point: Not applicable	**pH:** 4-7
VOC Content: 0%	**Octanol/Water Coefficient:** Not determined
Solubility: Partial	**Decomposition Temperature:** Not determined
Viscosity: Not determined	
Flashpoint: Not determined	**Autoignition Temperature:** Not determined
Flammable Limits: LEL: Not determined	**UEL:** Not determined

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: None known.
Conditions to Avoid: None known.
Incompatible Materials: Strong bases, strong oxidizing agents, strong reducing agents,
Hazardous Decomposition Products: When heated to decomposition emits toxic oxides of sodium and phosphorus.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:
Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation. May cause nausea, vomiting and diarrhea. Large amounts may cause decreased blood pressure, decreased heart rate and coma.
Inhalation: Inhalation of mists may cause irritation of the nose throat and upper respiratory tract.
Eye: May cause slight irritation with pain and tearing.
Skin: May cause slight irritation on prolonged or repeated contact.
Sensitization: This material is not known to cause sensitization.
Chronic: None known.
Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
Germ Cell Mutagenicity: None currently known.
Reproductive Toxicity: None currently known.

Numerical Measures of Toxicity: Oral rat LD50: >5840 mg/kg.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Daphnia magna EC50 48hr: >485 mg/l; Rainbow trout LC50 96-hr: >1000 mg/l; Medina & Mysid shrimp LC50 96hr: >1000 mg/l
Persistence and Degradability: Biodegradation is not applicable to inorganic substances.
Bioaccumulative Potential: No data available

Mobility in Soil: No data available
Other Adverse Effects: None known

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state and federal environmental regulations.

14. TRANSPORT INFORMATION

Dot Hazardous Materials Description:
Proper Shipping Name: Not Regulated
UN Number: None
Hazard Class/Packing Group: None
Labels Required: None

15. REGULATORY INFORMATION

CERCLA: Releases above the reportable quantity of 20,400 lbs must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Not hazardous

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:
This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.
Canadian CEPA: All the components of this product are listed on the Canadian DSL.
Canadian WHMIS Classification: Not hazardous

16. OTHER INFORMATION

NFPA Rating: Health = 1 Fire = 0 Reactivity = 0
HMIS Rating: Health = 1 Fire = 0 Reactivity = 0

SDS Revision History:
08/02/07: New SDS
08/07/12: Updated SDS

HMIS Hazard Ratings

Health	1
Fire	0
Reactivity	0

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Sterling Water Technologies LLC shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.

Sterling® Ultra C1S

Sheets and Rolls

Coated One Side, Performance.

Delivering more than four decades of proven performance, **Sterling® Ultra C1S** outperforms the competition in the most demanding printing, converting and laminating applications. Sterling® Ultra C1S runs flat, stay flat... Performance tried and true.

Features:

- Performance is Where You Win
  - Greater reliability than the competition, even in the most demanding applications
  - Delivering sheet stability, low curl reactivity, day in day out consistent performance
- Optics and Print Surface Increase Shelf Appeal
  - Sterling® Ultra C1S delivers the spectacular print quality you expect from Sterling®
  - Sterling® Ultra C1S offers all the functionality and reliability with a bright white shade that enhances the impact of product packaging and shelf appeal
- Service Designed for Any Size - Fast
  - Verso stocks the widest selection of C1S items available
  - Custom size three day PressDate® Service saves you time and money
- Commitment to C1S
  - Four decades of research and manufacturing excellence in every sheet for the most demanding printing, converting and laminating applications. Now and always.
- Manufactured in the USA with Pride
  - Purchase Sterling® Ultra C1S and put Americans to work
  - Proven quality and performance from a trusted U.S. manufacturer backed by our guarantee of full customer and technical support from start to finish

Applications:

- Glue-applied labels
- Litho lamination
- Point-of-purchase displays
- Box wraps
- Book dust jackets
- Posters
- Envelopes
- Gift wrap
- Pressure sensitive labels
- Foil lamination
- Specialty packaging
- Specialty converting processes

Printing Processes:

- Sheetfed offset
- Flexographic

Sterling® Ultra C1S Sheet Specifications:

Grade	Basis Wts	GSM	Brightness	Gloss	Opacity
Gloss Text	70	104	89	72	89.5
	80	118	89	72	92
	95	140	89	72	94

Product Stewardship and Sustainability:

Sterling® Ultra C1S is acid free and designed for permanence. Sterling® Ultra C1S is manufactured using elemental chlorine-free bleach (ECF).

Manufactured with 10% post-consumer waste (PCW) recycled fiber upon request with upcharge.

To review product stewardship and sustainability information please see the Verso Product Regulatory Profile Sheet posted at www.versoco.com/ProductRegulatoryProfile.

For additional information, contact your Verso representative.

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Printed on **Sterling® Premium Digital™ for HP Indigo** Gloss, 100 lb. cover.

Verso Corporation is the turn-to company for those looking to successfully navigate the complexities of paper sourcing and performance. A leading North American producer of specialty and graphic papers, packaging and pulp, Verso provides insightful solutions that help drive improved customer efficiency, productivity, brand awareness and business results. Verso's long-standing reputation for quality and reliability is directly tied to our vision to be a company with passion that is respected and trusted by all. Verso's passion is rooted in ethical business practices that demand safe workplaces for our employees and sustainable wood sourcing for our products. This passion, combined with our flexible manufacturing capabilities and an unmatched commitment to product performance, delivery and service, make Verso a preferred choice among commercial printers, paper merchants and brokers, converters, publishers and other end users. For more information, visit us online at versoco.com.

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