



Material Safety Data Sheet (574) 622-6020 Shipping Containers/Boxes/Cartons/Packages

1. Product Identification

Product	Manufacturing Location
Containers/Boxes/Cartons/Packages	1725 Commerce Drive Bristol IN 46507

Synonyms: None.

2. Hazardous Ingredients/Identity Information

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Linerboard (paper fiber/cellulose)		45 - 85	OSHA OSHA ACGIH	EL-TWA 15 mg/m3 EL-TWA 5 mg/m3 TLV-TWA 10m /m3	Total dust Respirable dust Total dust
Corrugating medium (paper fiber/cellulose)	9004-34-6	15 - 50	OSHA OSHA ACGIH	EL-TWA 15 mg/m3 PEL-TWA 5 mg/m3 TLV.TWA 10m /m3	Total dust Respirable dust Total dust
Starch-based adhesive	None	1 - 3	OSHA OSHA ACGIH	PEL-TWA 15 mg/m3 EL-TWA 5 mg/m3 TLV-TWA 10m /m3	Total dust Respirable dust Total dust
Joint adhesive	None	0- 1	OSHA ACGIH	None None	None None
Water-based ink	None		OSHA ACGIH	None None	None None

Involves one or none of the following: polyvinyl acetate, hot melt (polyolefin), tape, or staples.



3. Hazard Identification

Appearance and Odor: The products are boxes with little or no odor.

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

Medical Conditions Generally Aggravated by Exposure: Cellulose dust may aggravate preexisting 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

'ARC Monographs: Not listed

OSHA Regulated: Not listed

.. 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. Get 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 obstruction in the nasal passages. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

5. Fire and Explosion Data

Flash Point (Method Used): NAP Flammable Limits:

I-EL: See below under "Unusual Fire and Explosion Hazards"

UEL: NAP

Extinguishing Media: Water.

Autoignition Temperature: 446⁰ - 464⁰F (230⁰ - 240⁰C)

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.

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 paper dust for recovery or disposal. Avoid dusty conditions and provide adequate ventilation. Minimize compressed air blowdown or other practices that generate high dust levels. Use NIOSH/MSHA approved dust respirator and goggles where ventilation is not possible and exposure limits may be exceeded.

•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.

Exposure •Control Measures

Personal Protective Equipment:

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

PROTECTIVE GLOVES Not applicable for product in purchased form. 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.

WORKHYGIENE PRACTICES Not applicable for product in purchased form.

8. Exposure Control Measures, cont.

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

Boiling Point @ 760 mm Hg):	NAP
Vapor Pressure (mm Hg):	NAP
Vapor Density (air = 1; 1 atm):	NAP



Specific Gravity (1-120 = 1):	0.1 - 0.3
Melting Point:	NAP
Evaporation Rate (Butyl acetate = 1):	NAP
Solubility in Water (°/0 by weight):	Insoluble
% Volatile by Volume @ 70°F (21 °C)]	NAP
pH:	NAP

stability and Reactivity

Stability: () Unstable (x) Stable

Conditions to Avoid: Avoid open flame and sparks.

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents.

Hazardous Decomposition or By-Products: Combustion products include carbon monoxide and carbon dioxide.

Hazardous Polymerization: () May occur (x) Will not occur

•Toxicological Information

None available for product in purchased form. Individual component information is listed below if available.

Linerboard and corrugating medium: Cellulose LC50 (rats, inhalation) = 5,800 mg/m³/4 hours.

Starch-based adhesive: None.

Joint adhesive: None.

Water-based ink: None.

Source: Registry of Toxic Effects of Chemical Substances (RTECS), National Institute for Occupational Safety and Health (provided by Canadian Centre for Occupational Health and Safety, CCINFO May 1995).

ecological information

No information available at this time.

13. Disposal Considerations

Waste Disposal Method: If disposed of or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the user's responsibility to determine at the time of disposal whether your product meets EPA RCRA criteria for hazardous waste. Follow applicable federal, state, and local regulations.

14. Transport Information



Not regulated as a hazardous material by the U.S. Department of Transportation. 15.

Regulatory information

It is the user's responsibility to determine what regulatory information is relevant to the usage of this product.

16. Additional Information

Date Prepared: 12/10/85

Date Revised: 1/1/2015

Prepared By: Safety & Health Risk Management

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 this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most upto-date issue.

Definition of Common Terms:

ACGIH