

1. Identification

Identification of the substance

Product Code: Coroplast®, Packaging & Graphics Grades **Product Description:** Corrugated sheeting in various colors

Use(s) of the substance: Product intended for use in a wide range of panel/sheet applications in graphics

and packaging.

Restriction(s) on use of the substance: None known

Company Identification

Coroplast Inc. 101 N. Wacker Drive Suite 2005 Chicago, IL 60606 USA Phone: 312 525-8281

Emergency Telephone

800 361-5150

2. Hazard(s) Identification

PHYSICAL APPEARANCE: Polyproylene sheets that are translucent or in various colors

IMMEDIATE CONCERNS: When using or handling Coroplast® sheets, as supplied, there are very low hazards.

OSHA Hazard Category: Combustible Dust **GHS Hazard Categories:** Not classified

SIGNAL WORD: WARNING! This product as shipped is not classified as a combustible dust; however, a combustible concentration of dust may occur if fines are suspended in air (e.g. from cutting or sanding the Coroplast® sheets).

PICTOGRAM: There is no pictogram for a combustible dust hazard.

Rough edges of Coroplast® sheets could result in minor cuts to hands. Appropriate gloves should be worn to prevent cuts and/or scraps.

Avoid contact with strong oxidizing agents.

When working with the Coroplast® sheets at temperatures above the melting point, the material may begin to decompose producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes, oxides of nitrogen and other unidentified organic compounds that come from the breakdown of the materials used to make the sheets. Adequate ventilation should be provided to minimize exposures to vapors.

When cutting, shaping or modifying Coroplast® sheets, other hazards may exist.

POTENTIAL HEALTH EFFECTS

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Eyes: Dust from cutting may result and mechanically irritate the eyes; if using elevated temperatures,

vapors may irritate eyes.



Skin: Cuts or scraps referenced above; if using elevated temperatures to soften the Coroplast®

sheets, exposure to molten resin may cause thermal burns.

Ingestion: Dust or debris from cutting may irritate the throat, mouth and stomach

Inhalation: Inhalation of fine dust, from cutting or sanding, may cause irritation of the respiratory system;

inhalation of vapors from use of elevated temperatures may also cause irritation of the

respiratory system.

Chronic: Inhalation of fine dust is a potential carcinogen situation from respirable particles of carbon

black and/or titanium dioxide.



SIGNAL WORD: WARNING!: Titanium dioxide and carbon black have been classified by IARC as Group 2B carcinogens, possible human carcinogens, when they are inhaled as dusts. If dusty conditions occur from these products (e.g. during cutting or sanding), AVOID breathing dusts. The permissible exposure limit (PEL) for titanium dioxide (respirable dust) is 5 mg/m³. The PEL for carbon black is 3.5 mg/m³.

3. Composition and Information on Ingredients

The primary composition of this product is polypropylene.

This product contains a proprietary blend of components encapsulated within a polymer matrix. These components are not considered to be hazardous chemicals in the concentrations used per the OSHA HazCom Standard, 29 CFR 1910.1200. However, dusts containing titanium dioxide and carbon black are considered potential human carcinogens by IARC.

Chemical Name Propylene/ethylene copolymer Stabilizers/Additives/Colorants Titanium Dioxide	CAS Number 9010-79-1 trade secrets 13463-67-7	Wt. % >95 <5 0.1 - 2.0
Additional for Black Products: Carbon black	1333-86-4	0.1 – 2.0

4. First Aid Measures

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The following applies should the Coroplast® sheets be cut, sanded or otherwise processed which generates dust, debris or vapors.

Eye Contact: Wash immediately with plenty of water. If irritation persists, get medical attention.

Skin: For cuts and scraps, get medical attention. If molten material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Get medical attention.

Ingestion: If swallowed, do not induce vomiting. Get medical attention.

Inhalation: Move to fresh air. If irritation persists or breathing difficult, get medical attention.



5. Fire Fighting Measures

Extinguishing Media: Foam, carbon dioxide (CO₂), water spray

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, ketones, acrolein, formaldehyde, aldehydes, oxides of nitrogen, unidentified organic compounds and other possible toxic combustion products.

Explosion Hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Special protective equipment for firefighters: Use self-contained breathing apparatus and full protective gear.

Sensitive To Static Discharge: Static discharge could be an ignition source for a combustible concentration of dust.

Sensitivity To Impact: Not Applicable

6. Accidental Release Measures

As supplied, the product presents no risk of spill or release.

GENERAL PROCEDURES: Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

7. Handling and Storage

GENERAL PROCEDURES: Keep away from heat, sparks and flame. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

HANDLING: If the product is cut or sanded, avoid exposure to dust and debris. Provide appropriate local ventilation at machinery and at places where dust can be generated. In addition, wear suitable respiratory equipment to avoid breathing dusts containing titanium dioxide and/or carbon black.

STORAGE: No special storage conditions are required. If multiple pallets of product are stacked, take appropriate measures to avoid leaning or tipping of pallets. This product may react with strong oxidizing agents and should not be stored near such materials. Store material in areas protected with automatic sprinklers.

STORAGE TEMPERATURE: 60°C (140°F) Maximum

8. Exposure Controls and Personal Protection

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ENGINEERING CONTROLS: Provide adequate room ventilation. Provide adequate ventilation in areas where vapors can be generated. Eliminate ignition sources in areas where dust where dust could be generated (e.g. cutting area). Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). It is recommended that all dust control equipment such



as local exhaust ventilation contain explosion relief vents or an explosion suppression system

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Not required under normal handling and processing. Should conditions exist that require respiratory protection, for example while cutting or sanding generating dusts, a NIOSH/MSHA approved respirator should be worn to avoid inhalation of dusts containing titanium dioxide and/or carbon black.

Eye Protection: When cutting or processing the product, wear safety glasses with side shields.

Body Protection: Wear protective gloves to avoid incidental cuts or scraps that could occur when handling the edges of product.

9. Physical and Chemical Properties

Physical Form: corrugated sheets, also called double wall Material Density: 0.90 to 0.96 g/cc (not product density)

Appearance: Opaque or various colors

Odor: None

Solubility in water: Not applicable
Melting Point: 160°C (320°F)
Boiling Point: Not applicable
Flash Point: Not applicable
Auto Ignition Temp: 570°C (1058°F)

10. Stability and Reactivity

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Do not store product near heat or flame. When cutting or sanding, minimize dust generation and accumulation. Avoid contact with strong oxidizing agents, strong alkaline agents and strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures, the material will begin to decompose, producing vapors that can contain carbon monoxide, carbon dioxide, ketones, acrolein, formaldehyde, other aldehydes, oxides of nitrogen, other unidentified hydrocarbons and other possible toxic substances.

11. Toxicological Information

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Acute Toxicity: Dust containing titanium dioxide and carbon black are considered nuisance dusts and are irritants to the upper airway system.

Repeated dose toxicity: No known chronic health effects

Carcinogenicity: Titanium dioxide and carbon black are both classified as 2B by IARC, possible human carcinogens, by inhalation. OSHA considers titanium dioxide to be a possible human carcinogen.



Carbon black is not designated as a carcinogen by the U. S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Administration (OSHA).

The American Conference of Governmental Industrial Hygienists (ACGIH) classifies carbon black as A4, Not Classifiable as a Human Carcinogen.

The U. S. National Institute of Occupational Safety and Health (NIOSH) 1978 criteria document on carbon black recommends that only carbon blacks with PAH level greater than 0.1% require the measurement of PAHs in air. As some PAHs are possible human carcinogens, NIOSH recommends an exposure limit of 0.1 mg/m³ for PAHs in air, measures as the cyclohexane-extractable fraction.

12. Ecological Information

Ecotoxicity: Polypropylene is an inert polymer and is believed to not to contribute to environmental toxicity.

Persistence and Degradabaility: The product is not readily biodegradable.

Bioaccumulative Potential: No information available.

Recyclability: High polypropylene content. Recycle code 5.

13. Disposal Considerations

DISPOSAL METHOD:

- (1) Recycle (reprocess).
- (2) Incineration including energy recovery of waste material in a permitted facility in accordance with local, state or provincial and federal regulations.
- (3) Landfilling in a licensed facility in accordance with local, state or provincial and federal regulations.

RCRA HAZARD CLASS: This product is not judged to be a hazardous waste by any local, state or federal regulations; however, it may be listed as industrial waste in some states or provinces. This product is not listed in the U.S. federal hazardous waste regulations, 40 CFR 261.33 paragraphs (e) or (f), i.e., chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261 Subpart C. State or local hazardous waste regulations may apply if different from the federal.

14. Transport Information

SPECIAL SHIPPING NOTES: This product is not regulated by US DOT, IMO, IATA, Canadian TDG and associated regulations, ADR or RID.

15. Regulatory Information

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UNITED STATES

U.S. Toxic Substances Control Act (TSCA): All component(s) comprising these products are compliant



with TSCA. These products have no special requirements under TSCA (e.g. consent orders, test rules, 12(b) requirements, etc.).

OSHA HAZARD COMM. RULE: This product is not considered a hazardous material as shipped or at temperatures below the melting point according to OSHA definitions.

SARA Title III: This product is not subject to SARA Title III requirements.

SARA Section 313 Toxic Chemical List: No components listed.

CANADA

Domestic Substances List (DSL): All component(s) comprising this product are compliant with the DSL.

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product is not considered a controlled substance under WHMIS. This SDS meets WHMIS format requirements.

16. Other Information

HMIS Ratings: Health: 0

Flammability: 1
Physical Hazard: 0

Revision: 2014-04-30

Revision Changes: Changed format to 16 Section Safety Data Sheet (SDS) to comply with OSHA HazCom Standard update published in the Federal Register of March 26, 2012 and the UN Global Harmonization System of Classification and Labeling of Chemicals (GHS) requirements

Refer to NFPA 652, Standard for Combustible Dusts, and NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Disclaimer:

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This Safety Data Sheet (SDS) conforms to the U.S. Department of Labor Occupational Safety and Health Administration requirements in 29 CFR 1910.1200 and is an integral part of any "RIGHT TO KNOW" program. This information should be read by the customer and made available to anyone who has reason to use or to come in contact with this product.

The information reported in this document is believed to be accurate based on information from suppliers and manufacturing practices of Coroplast, Inc. Users should perform verifications and testing to confirm suitability for specific uses and applications. This MSDS document does not convey or infer a warranty of fitness for a particular purpose. This safety document supersedes any that was previously provided as it contains the most current information; note revision date at bottom of each page.