Material Safety Data Sheet

Ticona

Product Name:	CELANEX 3300LM, ED4222, BLACK
Product Code:	50004413
MSDS Number:	CX2000
Revision Number:	5
Version Date:	12/26/2006

Section 1. Chemical, Product and Company Identification

Product Name: CELANEX 3300LM, ED4222, BLACK

Product Code: 50004413

MSDS Number: CX2000

Synonyms: POLYBUTYLENE TEREPHTHALATE
THERMOPLASTIC POLYESTER

Responsible Party:
TICONA
8040 DIXIE HWY.
FLORENCE, KY 41042
UNITED STATES
http://www.ticona.com

Product Use: Engineering thermoplastic.

MSDS prepared by Jack Grates of Ticona (phone 859-372-3158)

Section 2. Composition/Information on Ingredients

Ingredients:

Ingredient	CAS Number
Base Resin	30965-26-5

This is a polymeric material. Any hazardous constituents are wetted by the polymer system, and therefore, present no likelihood of exposure under normal conditions of processing and handling.
This product may contain proprietary ingredients.
While this product is not classified as hazardous under OSHA Regulations, this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and made available for employees and other users of the product.

Section 3. Hazards Identification

Emergency Overview: Pellets or chips with slight to no odor. Combustion and decomposition may produce hazardous fumes. Base resin dust/powder has a US Bureau of Mines relative dust explosion hazard rating of weak. Molten material can cause thermal burns on contact with skin or eyes. Spilled pellets may create a slipping hazard.

Potential Health Effects:

Routes of Exposure: Skin and eye contact; inhalation of vapors, if overheated.

Signs and Symptoms of Exposure: No specific information available.

Immediate Effects:

Skin: No specific information available on the product. Hot or molten material has the potential to cause thermal burns. Polymer particles can cause mechanical irritation.

Eyes: No specific information available on the product. Polymer particles can cause mechanical irritation. Degradation vapors may cause irritation.

Inhalation: No specific information available on the product. In the form supplied, this material is not considered an inhalation hazard; polymer particles may be considered an inert nuisance particulate. Overheating in processing may generate hazardous, irritating vapors.

Ingestion: No specific information available on the product; however, low toxicity by this route is expected based on the biological activity of high molecular weight polyesters.

Long Term/Delayed Effects: No specific information available.

Carcinogenicity: No specific information available on the product.

Medical Conditions Aggravated by Exposure: No specific information available on the product. Off-gases, which may be released if overheated, may affect those with chronic diseases of the respiratory system.

Section 4. First Aid Measures

Skin: If hot or molten polymer or hot vapors contact skin, cool rapidly with cold water. If polymer is stuck to skin, do not remove. Seek medical attention. Allow adhered polymer to come off naturally. Removal of adhered polymer may result in more tissue damage than if polymer is allowed to come off over time.

Eyes: Flush with plenty of water. Seek medical attention if discomfort persists, and to remove foreign body.

Inhalation: Remove to fresh air. Seek medical attention if breathing difficulties occur.

Ingestion: If a significant quantity has been swallowed, give two glasses of water to dilute. Seek medical attention.

Note to Physicians: This product is essentially inert and nontoxic. However, if it is heated at too high a temperature or if it is burned, gases may be released (see Sections 5 and 10 for off-gases). Patients who have been exposed to off-gases may need to have their arterial blood gases and carboxyhemoglobin levels checked. If the carboxyhemoglobin levels are normal, asphyxia (carbon dioxide replacing oxygen) is a possibility. As with any fire, irritant gases may have formed. If patients may have inhaled high concentrations of irritating fumes, they should be monitored for delayed onset pulmonary edema.

Section 5. Fire Fighting Measures

Flashpoint: > 93 deg C (>200 deg F) by Tag Closed Cup Method.

Base resin dust/powder has a US Bureau of Mines relative dust explosion hazard rating of weak.

Hazardous Products of Combustion: Carbon monoxide and carbon dioxide.

Extinguishing Media: Water spray, foam, carbon dioxide, or dry chemical.

Firefighting Instructions: Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out gear (bunker gear). Keep personnel removed from and upwind of fire. Water should be used to keep fire-exposed containers cool. Water, foam and dry chemical may cause damage to electrical equipment.

Section 6. Accidental Release Measures

*For more information, see regulatory section 15.

Procedures in Case of Spill or Leak: Sweep or gather up spills and place in proper container for recovery or disposal. Ticona supports SPI's Operation Clean Sweep.

Section 7. Handling and Storage

Handling: Do not handle hot or molten material without appropriate protective equipment. Maintain good housekeeping in work areas. Do not exceed recommended process temperatures to minimize release of decomposition products. Do not smoke in areas where polymer dust is present. Appropriate measures should be taken to control the generation and accumulation of dust during conveying and processing operations.

Storage: Store in a cool dry place. Maintain dryness of resin.

Section 8. Exposure Controls/Personal Protection

Engineering Controls: Local Exhaust: Recommended when appropriate to control employee exposure to dust or process vapors.
General: May not be adequate as the sole means to control employee exposure.

Protective Equipment:

Skin: When thermal or melt processing, wear long pants, long sleeves, well insulated gloves, and face shield when there is a chance of contact.

Eyes: Safety eyewear recommended.

Inhalation: A NIOSH approved respirator is recommended if there is a possibility of dust generation above permissible exposure limits or that decomposition vapors may be generated.

Exposure Guidelines: The glass particles in this product are wetted by the polymer system. Residual glass (<1%) may be present and cause mechanical eye, skin and respiratory irritation. Operations involving grinding and machining of parts should be reviewed to assure that particulate levels are kept below recommended standards. See the exposure limits below.

Ingredient:	Agency:	Value:
Nuisance/inert dust	OSHA PEL	TWA: 15 mg/cu m (total) 5 mg/cu m (respirable)
Nuisance particulates	ACGIH TLV	TWA: 10 mg/cu m (total) 3 mg/cu m (respirable)

Ticona recommends the ACGIH Limit.

Section 9. Physical and Chemical Properties

Appearance:	Pellets
Odor:	Slight characteristic odor
Physical State:	Solid
Vapor Pressure:	< 0.001 mm Hg
Melting Point:	228.0 deg C (442.4 deg F).
Solubility:	Negligible < 0.1% (in water)
Specific Gravity:	1.3 - 1.65
Percent Volatiles:	< 0.5 by weight

Section 10. Stability and Reactivity

Chemical Stability:	Stable under ordinary conditions of use and storage.
Conditions to Avoid:	Flame; do not heat above 550 deg F (288 deg C). Avoid prolonged exposure to temperatures above 520 deg F (271 deg C).
Incompatibility:	Strong bases.
Hazardous Decomposition Products:	Aldehydes, ketones, esters, acids, alcohols, butadiene, tetrahydrofuran, toluene, benzoic acid, and terephthalic acid.
Hazardous Polymerization:	Will not occur.

Section 11. Toxicological Information

No specific information available on the product.

Section 12 Ecological Information

Ecotoxicity:	The effects of resin pellets on the wildlife that may ingest them is not well understood. In the case of seabirds, some marine biologists believe that the fowl may not be able to pass plastic pellets through their digestive tracts. Thus, large quantities of ingested pellets may cause intestinal blockage, false feelings of satiation or reduction in absorption of nutrients, causing malnutrition and starvation. The goal of SPI's Operation Clean Sweep is zero loss of pellets into the environment.
Environmental Fate/Information:	This material is considered to be non-biodegradable.

Section 13. Disposal Considerations

Disposal:	Recycling is encouraged. Dispose of in accordance with federal, state, and local regulations. This product, as shipped, is not a RCRA hazardous waste under present EPA regulations.

Section 14. Transport Information

Not regulated under US Department of Transportation, IMDG, or IATA

Section 15. Regulatory Information

TSCA: All ingredients are listed in the TSCA Inventory or are compliant with the TSCA Polymer Exemption Rule.

SARA: This product does not contain any toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.

Other: For information regarding regulations not listed please contact Ticona Product Stewardship.

Section 16. Other Information

Hazard Ratings:

Agency	Health	Flammability	Physical Hazard	Other
NFPA	1	1	0	
HMIS	0	1	0	

Note 1: NFPA and HMIS ratings are as determined by Ticona.

Note 2: Revisions in this version include Sections 3 and 8.

Disclaimer:

This product is not intended for use in medical or dental implants.

Refer to the appropriate Ticona bulletins for specific processing guidance and good manufacturing practices (purging, processing parameters, shutdown, etc.).

The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Ticona makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.