

## MATERIAL SAFETY DATA SHEET

### Plastic Capillary Tubes

#### SECTION I – NAME AND PRODUCT

Manufactured for: Separation Technology, Inc. 1096 Rainer Dr. Altamonte Springs, FL 32714 (407) 788-8791/(407) 788-3677 (Fax)	Product Name: LEXAN 103-111 Generic Name: Plastic Capillary Tubes Catalog #: 270-106, 270-107
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#### SECTION II – PRODUCT INFORMATION

(PHRASE:O1DES_LEXAN); Product Description: Product Use: Regulatory Status:	Synthetic thermoplastic polymer May be used to produce molded or extruded articles or as a component of other industrial products. Not Regulated.
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#### SECTION III – PHYSICAL AND CHEMICAL COMPOSITION

Physical State:	Solid
Melting Point:	This product does not exhibit a sharp melting point but softens gradually over a wide range of temperatures.
Specific Gravity (Water = 1)	>1
Vapor Pressure (mmHg):	Negligible
Water Solubility:	Insoluble
% Volatiles:	Negligible
Appearance & Odor:	Plastic pellet with slight odor.
Evaporation Rate:	Negligible
Octanol/Water Partition Coefficient:	Not established

Components listed below are physical or health hazards as defined in the Hazard Communication Standard. The quantities represent typical or average values for the materials shown. Additional compositional data are provided in Section 15, REGULATORY INFORMATION, subject to supplier notification requirements.

Component Name %CAS Number OSHA PELACGIH TWANGE

Recommended Exp. Limits: This product does not contain any reportable hazardous materials

#### SECTION IV – FIRE AND EXPLOSION HAZARD DATA

##### FIRE FIGHTING MEASURES

Fire Fighting:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
Extinguishing Media:	Water spray and foam. Carbon dioxide and dry chemical are not Recommended because their lack of cooling capacity may permit re-ignition.
Conditions of Flammability:	Requires a continuous flame source to ignite.
Autoignition Temperature:	630 C (1166 F), estimated.
Explosion Data:	Material not sensitive to mechanical impact but is sensitive to static

Hazardous Combustion Products: discharge under dust cloud conditions.  
Intense heat, smoke, carbon dioxide, carbon monoxide, hydrocarbon fragments.

#### SECTION V – STABILITY AND REACTIVITY

Chemical Stability:	Stable
Reactivity:	Not reactive under recommended conditions of handling, storage, processing and use.
Incompatibility With Other Materials:	Avoid contact with Hydrofluoric Acid.
Hazardous Products of Decomposition:	Processing fumes evolved at recommended processing conditions may include trace levels of the following materials: phenols, alkylphenols, diarylcarbonate, tetrahydrofuran (THF).

#### SECTION VI – HEALTH HAZARD DATA

##### EMERGENCY OVERVIEW:

Pellets with slight or no odor.  
Spilled material may create slipping hazard.  
Can burn in a fire creating dense toxic smoke.  
Molten plastic can cause severe thermal burns.  
Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever.  
Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.

HMIS Ratings: Health = 0; Flammability = 1; Reactivity = 0; PPE=B

##### POTENTIAL HEALTH EFFECTS:

Ingestion:	No hazard in normal industrial use.
Skin Absorption:	No absorption hazard in normal industrial use.
Eye Contact:	Can cause mechanical irritation if dusts are generated.
Skin Contact:	Unlikely to cause irritation even on repeated contact.

##### CHRONIC/CARCINOGENICITY

NTP:	Not Tested.
OSHA:	Not Regulated.
IARC:	Not Listed.

Processing fumes may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur.

Grease-like processing fume condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

##### MEDICAL RESTRICTIONS:

There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

## FIRST AID MEASURES

Eyes:	Immediately flush eyes with plenty of water. Get medical attention if irritation develops or persists. After initial flushing, remove any contact lenses.
Skin:	Wash with soap and water. Get medical attention if irritation develops or persists. For hot product, immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.
Ingestion:	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop.
Inhalation:	No specific treatment is necessary since this material is not likely to be hazardous by inhalation.
Processing Fumes:	Processing fumes inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from the source of contamination or move victim to fresh air and obtain medical advice.

## TOXICOLOGICAL INFORMATION

### ACUTE HEALTH HAZARDS:

Acute Oral:	Oral LD50.5 g/kg
Eye Contact:	Product not considered primary eye irritant. When similar products, in finely divided form, were placed into the eyes of rabbits, slight transient redness or discharge occurred. This is consistent with the expected slightly abrasive nature of the resin particles.
Skin Contact:	Product not considered primary skin irritant. Draize Skin Primary Irritation Score (rabbit) for similar products, in finely divided form, for a 24-hour exposure is 0. Not expected to be a skin sensitizer based on results of Modified Buehler Guinea Pig Sensitization Test from similar products. Dermal LD50 (rabbit) .2g/kg, estimated.

### SUBCHRONIC HEALTH HAZARDS:

Subchronic Toxicity:	No data available.
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### CHRONIC HEALTH HAZARDS:

Carcinogenic Properties	
NTP:	Not Tested
OSHA:	Not Regulated.
IARC:	Not Listed.

### REGULATORY INFORMATION:

Toxic Substances Control Act (TSCA):	This product is in compliance with all rules and orders of TSCA.
WHMIS Product Classification:	Not a controlled product.

If any components in this product are SARA 313 listed as reportable, they are shown below. The quantities listed for elements represent typical or average values for compounds containing the element.

COMPONENT CAS NUMBER %: No SARA 313-listed chemicals in this product.  
If any components in this product are known to the State of California to cause cancer and/or are reproductive hazards, they are listed below:

COMPONENT REASON LISTED CAS NUMBER %:

## SECTION VII – EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, duct work, and other surfaces using appropriate personal protection. Local ventilation requirements must be determined to limit exposure to processing fumes in the workplace.

**PERSONAL PROTECTION:**

**Eye/Face:** Wear safety glasses with side shields or chemical goggles. In addition, use full face shield when cleaning processing fume condensates from hoods, ducts, and other surfaces.

**Skin:** When handling pellets or powder, avoid prolonged or repeated contact with skin. Wear long pants, long sleeves, well insulated gloves, and a face shield during melt processing. Appropriate clothing – including chemical resistant gloves – should be worn to prevent contact with processing fumes condensate.

**Respiratory:** When using this product at elevated temperatures, implement engineering systems, administrative controls, or a respiratory protection program.

## SECTION VIII – ECOLOGICAL AND DISPOSAL INFORMATION

**ECOLOGICAL**

**General:** This material is not expected to be harmful to the ecology.

**DISPOSAL**

**Waste Disposal:** Recycling is encouraged. Landfill or incinerate in accordance with Federal, state and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.

**Possible EPA Waste Codes:** No data.

**ACCIDENTAL RELEASE MEASURES**

**General:** Gather and store in a closed container pending a waste disposal evaluation. Allow molten material to solidify before disposal.

**SECTION IX – ADDITIONAL INFORMATION****HANDLING AND STORAGE**

Handling:	Follow recommendations on label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene practices. Provide adequate ventilation. Provide adequate ventilation. Secondary operations such as grinding, sanding, or sawing may produce a dust explosion hazard. Use aggressive housekeeping activities to prevent dust accumulation; employ bonding, grounding, venting, and explosion relief provisions in accordance with accepted engineering practices.
Storage:	Store in a cool dry place. Avoid excessive heat and ignition sources.
Prepared by:	Product Stewardship

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**ABBREVIATIONS:**

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS:	Chemical Abstracts Service
CFR:	Code of Federal Regulations
CPR:	Cardiopulmonary Resuscitation
EPA:	Environmental Protection Agency
HMIS:	Hazardous Material Identification System (National Paint and Coatings Association)
IARC:	International Agency for Research on Cancer
OSHA:	Occupational Health and Safety Administration (U.S.)
NTP:	National Toxicology Program
PEL:	Permissible Exposure Limit
PPE:	Personal Protective Equipment
SARA 313:	Superfund Amendments and Reauthorization Act, Section 313
TLV:	Threshold Limit Value
TSCA:	Toxic Substance Control Act
WHMIS:	Workplace Hazardous Materials Information System (Canada)

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