

MATERIAL SAFETY DATA SHEET

Essentium PCTG



Rev. Date: 6/14/2017

Thank you for your interest in Essentium Materials' products. We are providing this material safety data sheet [MSDS] as a courtesy to your request. We certainly expect you to read the entire MSDS and to call us with any required points of clarification. Please follow all precautions identified in this document.

Copyright, July 2013, Essentium Materials LLC, all rights reserved. Copying and/or disseminating this information for the purpose of properly utilizing Essentium Materials' products is allowed provided that: (1) no changes are made to the document and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Essentium PCTG

SUPPLIER: Essentium Materials LLC
ADDRESS: 5880 Imperial Loop Drive, Suite 10
College Station, TX 77845

MANUFACTURER: Essentium Materials LLC
ADDRESS: 5880 Imperial Loop Drive, Suite 10
College Station, TX 77845

SUPPLIER EMERGENCY CONTACTS & PHONE:

Essentium Materials LLC 979-777-2354
Email: sales@essentiummaterials.com
www.essentiummaterials.com

REV. DATE: 6/14/2017

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Copolyester	Proprietary	>90 %
Modifiers/Additives	Proprietary	<10 %

All ingredients in quantities > 1.0% (0.1% for carcinogens) that are potentially hazardous per OSHA definitions.

SECTION 3: HAZARDS IDENTIFICATION

Hazard Statement: Molten polymer will cause thermal burns. Please take all precautions necessary to avoid burns by the molten polymer.

Precautionary Statement: None

Signal word: None

Potential health effects: See Section 11 for more information

Environmental precautions: See Section 12 for more information.

Other Hazards: If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. See Section 7 and 8 for additional information.

SECTION 4: FIRST AID MEASURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial best practices are followed. Precautions should be taken to avoid inhalation and eye contact.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Skin Contact: Adverse effects are not expected from accidental skin contact following occupational exposure. After contact with skin, wash with water. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer. DO NOT attempt to remove hot polymer from skin or contaminated clothing as skin may be easily damaged. Call a physician immediately.

Ingestion: Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician immediately.

Inhalation: Move to fresh air. Call a physician immediately.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability:

Autoignition temperature: Unknown

Suitable extinguishing media: Carbon dioxide, water and sand.

Unsuitable extinguishing media: None known

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Dangerous product after decomposition: Combustion will produce carbon dioxide and probably carbon monoxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid contact with skin and eyes. Avoid dust formation. Remove all sources of ignition. Sweep up and remove to prevent slipping hazard.

Environmental precautions: Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Methods for cleaning up: Clean up promptly by scoop or vacuum. Sweep up and shovel into suitable containers for disposal.

SECTION 7: HANDLING AND STORAGE

Safe handling advice: Use personal protective equipment. Avoid contact with skin and eyes. Low hazard for usual industrial or commercial handling. Workers should be protected from the possibility of contact with molten material during fabrication. Avoid dust formation. If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. Protect from moisture and impurities. Keep the floor clear of pellets

Storage: Store the material in a closed container.

Precautions: No special precautions required.

Dangerous Reaction: No dangerous reactions are known.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Control:

Engineering measures: Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide appropriate exhaust ventilation at places where dust is formed.

Exposure limits: None established. This material can generate Particulates Not Otherwise Classifiable (PNOC). The Occupational Safety and Health Administration (OSHA) PEL/TWA for PNOC is 15 mg/m³ for total dust and 5 mg/m³ for the respirable fraction. The American Conference of Governmental Industrial Hygienists (ACGIH) TLV/TWA for PNOC is 10 mg/m³ for inhalable particulates and 3 mg/m³ for respirable particulates.

Threshold Limit Value (TLV): Not established

Personal protective equipment:

Eye protection: Safety glasses with side-shields. Goggles.

Skin and body protection: Impervious clothing. Gloves

Respiratory protection: Respirator must be worn if exposed to dust. Wear respirator with dust filter. Respiratory protection is needed if any of the exposure limits in Section 3 are exceeded. Consult an industrial hygiene professional prior to respirator selection and use. Use a positive-pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Hand protection: Preventive skin protection. Hygiene measures: Avoid contact with skin, eyes and clothing.

Special hazard: Workers should be protected from the possibility of contact with molten material during fabrication.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid Filament

Appearance: Clear, translucent, opaque, filament.

Color: Clear, Translucent, Opaque

Odor: No apparent odor

pH: Not applicable

Vapor pressure: Not determined

Vapor density: Not determined

Evaporation rate: Not applicable

Density: 1.0 g/cm³

Decomposition temperature: Not available

Boiling point / boiling range: Not available

Melting point / melting range: Not available

Autoignition temperature: Not available

Water solubility: Insoluble

Solubility in other solvents: Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None expected under conditions of normal use.

Chemical stability: Stable under recommended storage conditions.

Dangerous Reaction: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation: Low hazard for usual industrial handling

Eyes: Molten material will cause thermal burns.

Skin: Molten material will cause thermal burns.

Ingestion: Expected to be a low ingestion hazard

SECTION 12: ECOLOGICAL INFORMATION

Water Toxicity: Not Applicable

Biodegradable: Not expected to biodegrade

Mobility: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste from residues / unused products: In accordance with local and national regulations. Should not be released into the environment. Do not contaminate ponds, waterways or ditches with chemical or used container. Contact manufacturer.

Contaminated packaging: Empty remaining contents. Do not re-use empty containers. Empty containers should be transported/delivered using a registered waste carrier to local recyclers for disposal.

THE COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Not regulated for transportation

WATER TRANSPORTATION

PROPER SHIPPING NAME: Not regulated for transportation

AIR TRANSPORTATION

PROPER SHIPPING NAME: Not regulated for transportation

SECTION 15: REGULATORY INFORMATION

(not meant to be all inclusive - selective regulations represented)

Regulatory requirements are subject to change and may differ between locations. It is the User's responsibility to ensure that all activities comply with all federal, state or provincial and locals laws and regulations. The following specific information is made for the purpose of complying with numerous national, federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

Sara 313 title III: Not Listed

TSCA Inventory List: Listed

INTERNATIONAL REGULATIONS: Contact Essentium Materials, Inc. for more information.

SECTION 16: OTHER INFORMATION

DISCLAIMER:

Essentium Materials LLC nor any of its subsidiaries assumes any liability whatsoever for transporting/handling the product. It is the buyer's/user's/licensee's responsibility to ensure that its activities comply with all federal, state, provincial, or local laws and import/export requirements. We assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Essentium Materials LLC makes no warranties, expressed or implied, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. Final determination of suitability of any material is the sole responsibility of the user.