

**\*\*\*As of 9/1/11 Wellman Inc became a subsidiary of DAK Americas LLC and the following product MSDS specification sheets remain active for products that are produced under the Wellman name at the Pearl River Site in Bay St. Louis, MS\*\*\***

## Material Safety Data Sheet

**Polyester Copolymer**

**MSDS C1405**

**Revised 2/2/2012**

### 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### Material Identification

Formula : (C10H8O4)<sub>n</sub>

CAS Name : Terephthalic acid, polyester with ethylene glycol and isophthalic acid

CAS Number : 24938-04-3

#### Tradenames and Synonyms

Polyester copolymer, 100%

Products: ThermaClear*Ti*®818, PermaClear*Ti*®842, AquaClear*Ti*®844, UlteClear *Ti*®803  
61461, 61469, 61819, 61842, 61414

#### Company Identification

Wellman, Inc.  
3303 Port & Harbor Drive  
Bay St. Louis, MS 39520

#### Telephone Numbers

Product Information : (800) 227-6335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Polyester polymer contains minor additives such as stabilizers and catalysts. These additives are immobilized by the polymer and not released with normal use.

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

This product, as shipped, is not considered hazardous as defined by the OSHA Hazard Communication Standard (29CFR 1910.1200).

#### Potential Health Effects:

Heating the polymer to the melt point, such as in extrusion, may release a small amount of

MSDS C1405 2

acetaldehyde from degradation.

Burning the polymer may produce carbon monoxide. Carbon monoxide can cause carbon monoxide poisoning.

#### Carcinogenicity Information

None of the components in the polymer at greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

---

## 4. FIRST AID MEASURES

---

Inhalation: No specific treatment is necessary since polyester polymer is not likely to be hazardous by inhalation. If exposure results from burning the polymer, remove to fresh air and get medical attention if dizziness or nausea occurs.

Eyes: No specific treatment is necessary under normal situations.

Skin: No specific treatment is necessary. Polyester polymer is not irritating to the skin.

Ingestion: No specific treatment is necessary, as ingestion of the polymer is not likely.

---

## 5. FIRE FIGHTING MEASURES

---

#### Flammable Properties

- Flashpoint: Not applicable. Material will burn in a fire.
- Lower Explosive Limit: Not Applicable.
- Upper Explosive Limit: Not Applicable.
- Autoignition Temperature: Not available.
- Hazardous Combustion Products: Carbon monoxide.
- Unusual Fire and Explosion Hazards: Accumulation of dust could present a fire hazard.

#### Fire Fighting Media

Water spray or fog, CO<sub>2</sub>, dry chemical or foam.

#### Fire Fighting Instructions

As in any fire, wear MSHA/NIOSH approved, pressure-demand, self-contained breathing apparatus and full protective bunker gear.

---

## 6. ACCIDENTAL RELEASE MEASURES

---

#### MSDS C1405 3

#### Safeguards

No protective measures required unless the polymer is involved in a fire. See section 5 if this is the case.

#### Spill Clean Up

Vacuum or sweep up material for salvage or disposal.

---

## 7. HANDLING AND STORAGE

---

No special requirements for handling or storage, other than to store away from incompatible materials.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

### Engineering Controls

Ventilation: General ventilation is adequate to control acetaldehyde accumulation during extrusion operations. Local exhaust ventilation should be used to control levels of carbon monoxide.

### Personal Protective Equipment

Eye Protection: Safety glasses, preferably with side shields, should be worn with normal handling.

Skin Protection: None should be needed.

Respiratory Protection: None should be needed during normal handling. An MSHA/NIOSH approved full-face respirator with organic vapor cartridge(s) and high efficiency particulate filter(s) or other appropriate respiratory protection should be worn when exposure is expected from operations involving the burning of polymer residues.

### Exposure Limits:

	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Polymer	not applicable	not applicable
Acetaldehyde	100 ppm TWA 150 ppm STEL	100 ppm TWA 150 ppm STEL
Carbon monoxide	35 ppm TWA 200 ppm CEIL	50 ppm TWA 400 ppm TWA

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

### Physical Data:

Odor :	Odorless
Form :	Small cubes (chips)
Specific gravity :	(Water=1.0) 1.33-1.45
Vapor Density :	Not applicable
Melting Point :	455-490 deg F (235-255 deg C)
Intrinsic Viscosity :	0.60-0.84 (typical range)
Appearance :	Clear or white, smooth
pH :	Not applicable
Vapor Pressure :	Not applicable
Boiling Point :	Not applicable
Solubility in Water :	Insoluble

---

## **10. STABILITY AND REACTIVITY**

---

### Chemical Stability

Stable under normal temperatures and pressures.

### Conditions to Avoid

Temperatures above approximately 440 deg F (225 deg C) will cause decomposition in the presence of oxygen.

### Incompatibility with Other Materials

Can react with strong oxidizers, strong bases and strong acids.

### Decomposition

Hazardous decomposition products: Carbon dioxide, carbon monoxide, and aldehydes.

### Polymerization

Polymerization will not occur.

---

## **11. TOXICOLOGICAL INFORMATION**

---

Polyester polymer is non toxic.

---

## **12. ECOLOGICAL INFORMATION**

---

### Ecotoxicological Information

Polyester polymer is non toxic. Polyester chip, however should be kept out of waterways as it could be ingested by wildlife and eventually fill the stomach of an animal.

### Chemical Fate Information

Polyester polymer will not degrade biologically and will remain in place until cleaned up.

---

## **13. DISPOSAL CONSIDERATIONS**

---

### Waste Disposal

Polyester polymer, as supplied, is not a RECRA hazardous waste.

Chemical additions, processing or otherwise altering this material could, however, change this status. State and local regulations should be reviewed prior to disposal.

---

## 14. TRANSPORTATION INFORMATION

---

### Shipping Information

Department of Transportation (DOT): Not regulated

International Civil Aviation Organization (ICAO) Classification: Not regulated

International Maritime Dangerous Goods (IMDG) Classification: Not regulated

TDG Class (Canada): Not regulated

---

## 15. REGULATORY INFORMATION

---

### U.S. Federal Regulations

- OSHA hazardous chemical according to 29 CFR 1910.1200: No

- Toxic Substances Control Act (TSCA): All components listed on inventory.

- Subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: No

- SARA Sections 311 and 312 hazard classification: None

### State Regulations

- Materials known to the State of California to cause cancer or reproductive toxicity: This product poses no significant risk to persons exposed during normal use as defined by the California Safe Drinking Water and Toxics Enforcement Act (Proposition 65).

---

## 16. OTHER INFORMATION

---

### NFPA, NPCA-HMIS

#### NFPA Ratings:

Health : 1

Flammability : 1

Reactivity : 0

#### NPCA-HMIS Ratings

Health : 0

Flammability : 0

Reactivity : 0

Notice: NFPA and MHIS ratings involve data and interpretations that may vary from company to company and are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all information contained in this MSDS must be considered.

Additional Information

Label Statements:

LOW HAZARD FOR USUAL INDUSTRIAL OR COMMERCIAL HANDLING

**See Wellman Caution Statement on next page.**

---

To the best of our knowledge, the information contained herein is accurate. However, Wellman, Inc. assumes no liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

---

**CAUTION**

---

**Wellman Caution Bulletin No. 1**

**DO NOT USE WELLMAN MATERIALS IN MEDICAL APPLICATIONS INVOLVING PERMANENT, BRIEF, OR TEMPORARY IMPLANTATION IN THE HUMAN BODY OR PERMANENT CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES, UNLESS THE MATERIAL HAS BEEN PROVIDED DIRECTLY FROM WELLMAN UNDER A CONTRACT WHICH EXPRESSLY ACKNOWLEDGES THE CONTEMPLATED USE.**

WELLMAN MAKES NO REPRESENTATION, PROMISE, EXPRESS WARRANTY OR IMPLIED WARRANTY CONCERNING THE SUITABILITY OF THESE MATERIALS FOR USE IN THE HUMAN BODY OR IN CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES.

**THE CONTENT OF WELLMAN MATERIAL IS NOT CERTIFIED FOR IMPLANTS.** WELLMAN materials are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. WELLMAN has not performed clinical testing of these materials for implantation. WELLMAN will not provide to customers making implantable devices any notice concerning its materials, as specified under 21 C.F.R section 820.50, or any other information necessary for medical device use of the materials under any other statute or FDA regulation. WELLMAN has neither sought, nor received, approval from the FDA for the use of these materials in implantation in the human body or in contact with internal body fluids or tissues.

**ALL IMPLANTABLE MEDICAL DEVICES CARRY A RISK OF FAILURE AND ADVERSE CONSEQUENCES**

The medical judgment of a physician, a medical device seller and the FDA should be relied upon for identification of both harmful consequences and life-saving benefits from an implantation device comprised of specific materials. These benefits and risks can be found in published medical cases performing clinical medical studies of an implantable medical device. WELLMAN does not support the use of its products in these applications and cannot weigh the benefits against the risk defined in these articles. WELLMAN can not offer a medical judgment on the safety or efficacy of the use of its materials in such devices.

**DO NOT MAKE REFERENCE TO THE WELLMAN NAME OR ANY WELLMAN TRADEMARK IN ASSOCIATION WITH AN IMPLANTABLE MEDICAL DEVICE.**

Do not use a WELLMAN trademark or licensed trademark as the descriptive name of an implantable medical device (e.g. do not call it the "Delcron®" prosthesis, or do not call it a "Laser+® device" ).

End of Bulletin