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<b>Product name</b>	CoolPoly® E2		NAGH/EN
<b>MSDS number</b>	870038	<b>Revision Date</b>	Dec.04.2015
<b>Revision Number</b>	0.01	<b>Issuing date</b>	Dec.04.2015

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## 1. Product and company identification

Trade Name

### **CoolPoly® E2**

The following SDS applies to products described by combinations of the following trade name, product grade and color code listed below.

**Color Code:**

See Section 16 for list of Color Codes

**Manufacturer, importer, supplier**

**Ticona Polymer, Inc.**

**A business of Celanese**

8040 Dixie Hwy.

Florence, KY 41042

United States

www.celanese.com

**Transportation emergency phone numbers:**

In USA, call 800 424 9300

Outside USA, call 703 527 3887, collect calls accepted.

**Product Information**

info-engineeredmaterials-am@celanese.com

**Synonyms:**

Liquid crystal polymer / LCP

**Identified uses**

Plastic processing industry.

## 2. Hazard Identification

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200:**

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard (29CFR 1910.1200)

## 3. Composition/information on ingredients

**Chemical characterization**                      Liquid crystal polymer / LCP

**Remarks**

This product may contain proprietary ingredients.

This is a polymeric material. Any hazardous constituents are wetted by the polymer system, and therefore are unlikely to present exposure under normal conditions of processing and handling.

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## **4. First aid measures**

### **Skin**

Cool skin rapidly with cold water after contact with molten polymer. Do not peel solidified product off the skin. Immediate medical attention is required.

### **Eyes**

Immediately flush eye(s) with plenty of water. Call a physician if irritation persists.

### **Inhalation**

Move to fresh air in case of accidental inhalation of vapors. Get medical attention immediately if symptoms occur.

### **Ingestion**

If swallowed, do not induce vomiting - seek medical advice.

### **Notes to physician**

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. 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.

## **5. Fire-fighting measures**

**NFPA:**      **Health:** 1                              **Flammability:** 0                              **Instability:** 0

### **Suitable extinguishing media**

Water, Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

### **Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases**

Under conditions giving incomplete combustion, hazardous gases produced may consist of  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)

### **Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus and protective suit.

### **Other Information**

Keep people away from and upwind of fire. Dust can form an explosive mixture in air

## **6. Accidental release measures**

### **Personal precautions**

Avoid dust formation.

### **Environmental precautions**

No special environmental precautions required.

### **Methods for cleaning up**

Use mechanical handling equipment. Dispose of in accordance with local regulations.

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## 7. Handling and storage

### **Advice on safe handling**

Do not handle hot or molten material without appropriate protective equipment. Do not exceed recommended process temperatures to minimize release of decomposition products. Maintain good housekeeping in work areas.. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

### **Protection - fire and explosion:**

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..

### **Technical measures/Storage conditions**

No special technical protective measures required.

### **Material storage**

Keep in a dry, cool place. Maintain dryness of resin..

## 8. Exposure controls / personal protection

### **OSHA Exposure Limits**

No exposure limits established.

### **ACGIH Exposure Limits**

No exposure limits established.

### **Mexico National Exposure Limits**

No exposure limits established

## **Exposure controls**

### **Engineering measures**

General: May not be adequate as the sole means to control employee exposure.

Local Exhaust: Recommended when appropriate to control employee exposure to dust or process vapors.

### **Protective equipment**

A safety shower and eyebath should be readily available.

### **Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment

### **Skin protection:**

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

### **Eye/face protection:**

Safety goggles. safety glasses with side-shields.

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**Comments:**

Operations involving grinding and machining of parts should be reviewed to assure that particulate levels are kept below recommended standards

## 9. Physical and chemical properties

**Appearance**

Form	pellets
Odor	slight
Flash point	Not applicable
Ignition temperature	No data available
Melting Point	> 324 °C (> 615°F)
Density	Not Determined
Bulk density	Not Determined
Water solubility	insoluble
VOC Content(%)	Not determined

## 10. Stability and reactivity

**Chemical stability**

Stable under normal conditions

**Conditions to avoid**

Flame. Avoid prolonged heating at or above the recommended processing temperature.

**Incompatible Materials**

None known

**Hazardous Combustion or Decomposition Products:**

Thermal decomposition products may include oxides of carbon.

**Possibility of hazardous reactions**

No hazards to be especially mentioned.

## 11. Toxicological information

**Potential health effects**

**Routes of exposure** Skin, eyes, inhalation, ingestion.

**Immediate effects**

**Skin** Polymer particles may cause mechanical irritation. The molten product can cause serious burns.

**Eyes** Resin particles, like other inert materials, are mechanically irritating to eyes

**Inhalation** Dust irritating to respiratory tract. Overheating in processing may generate hazardous, irritating vapours.

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**Ingestion** Low toxicity by this route is expected based on the biological activity of high molecular weight polymers.

**Medical conditions which may be 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.

Toxicological data are not available. Observe the usual hygienic measures for handling chemicals.

## 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.. Do not discharge product unmonitored into the environment.

## 13. Disposal considerations

### **Disposal considerations**

Recycling is encouraged. Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

This product as shipped is not a RCRA hazardous waste under present EPA regulations

## 14. Transport information

**US Department of Transportation** Not regulated

**TDG** Not regulated

**Mexico Transport Information** Not regulated

**ICAO/IATA** Not restricted

**IMDG** Not regulated

## 15. Regulatory Information

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## 15. Regulatory Information

### US State Regulations

Chemicals associated with the product which are subject to the state right-to-know regulations are listed along with the applicable state(s):  
none

### U.S. FEDERAL REGULATIONS

#### **TSCA Inventory:**

This product complies with the U.S. Toxic Substances Control Act (TSCA).

#### **Environmental Regulations:**

#### **SARA 313 Chemicals**

Contains no substances at or above the reporting threshold under Section 313.

#### **SARA 311:**

<b>Acute health:</b>	No
<b>Chronic health:</b>	No
<b>Fire:</b>	No
<b>Sudden release of pressure:</b>	No
<b>Reactive:</b>	No

### INTERNATIONAL REGULATIONS

#### CANADIAN REGULATIONS

**WHMIS Classification:** Not a WHMIS controlled product.

#### **WHMIS Ingredient Disclosure List IDL:**

This product does not contain substances required to be disclosed according to the Canada WHMIS Ingredient Disclosure List.

## 16. Other information

NFPA:	Health: 1	Flammability: 0	Instability: 0
HMIS:	Health: 1	Flammability: 0	Physical Hazard: 0

#### **Prepared By**

Product Stewardship Department  
Celanese

#### **Sources of key data used to compile the datasheet**

Information contained in this safety data sheet is based on Celanese owned data and public sources deemed valid or acceptable.. The absence of data elements required by ANSI or 1907/2006/EC indicates that no data meeting these requirements is available..

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**Other Information:**

Observe national and local legal requirements

Except as otherwise noted, all of the trademarks referenced herein are owned by Ticona or its affiliates.

Changes against the previous version are marked by \*\*\*

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

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. Celanese 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 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.

**Abbreviation and Acronym:**

ADR = Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID = Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG = International Maritime Code for Dangerous Goods

IATA = International Air Transport Association

ICAO = International Civil Aviation Organization

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

EINECS = European Inventory of Existing Commercial Chemical Substances

CAS = Chemical Abstracts Service (division of the American Chemical Society)

CLP = Classification, Labelling and Packaging

DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration