

# MATERIAL SAFETY DATA SHEET

*CELOGEN® 780*

Version: 1.3  
Date of Issue: 11/14/2006  
Date printed: 11/30/2007

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## 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product name :** CELOGEN® 780

**Chemical name:** Azodicarbonamide formulation

**Use of substance/preparation:** No specific information

**Supplier:**  
Lion Copolymer Geismar, LLC  
36191 Louisiana Highway 30  
Geismar, LA 70734 USA

**Emergency telephone number:** CHEMTREC (24 hours) 800-424-9300 (USA and Canada)  
CHEMTREC (24 hours) +1 703-527-3887 (Other countries)

**Environmental, Health and Safety Department:** +1 225-673-8871 or 1 225-267-3608

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

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<u>INGREDIENT</u>	<u>% BY WEIGHT</u>
Azodicarbonamide CAS# 123-77-3	85
Zinc compound CAS# Trade secret	10
Zinc compound CAS# Trade secret	5

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## 3. HAZARDS IDENTIFICATION

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### EMERGENCY OVERVIEW

*CAUTION!*

MAY CAUSE EYE IRRITATION.  
MAY CAUSE SENSITIZATION BY INHALATION.  
REPEATED EXPOSURE MAY CAUSE SENSITIZATION OF THE RESPIRATORY TRACT AND THE DEVELOPMENT OF AN ASTHMATIC REACTION ON FURTHER EXPOSURE.  
VAPOR GENERATED AT HIGH TEMPERATURE (THERMAL DEGRADATION) CAN BE IRRITATING.  
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE  
- AN EXISTING LUNG DISEASE  
AVOID DISPERSION OF DUST IN AIR TO REDUCE POTENTIAL FOR DUST IGNITION/EXPLOSIONS.

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## 4. FIRST AID MEASURES

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### **Swallowing**

Do not induce vomiting. Rinse mouth and then drink water. Obtain medical attention.

### **Inhalation**

Remove to fresh air. Obtain medical attention.

### **Skin contact**

Remove contaminated clothing. Wash thoroughly with warm water using a mild soap. Obtain medical attention if irritation persists.

### **Eye contact**

Immediately flush eyes with water and continue washing for several minutes. Obtain medical attention if irritation persists.

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## 5. FIRE-FIGHTING MEASURES

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### *NFPA CLASSIFICATION*

<b>Health: 2</b>	<b>Flammability: 3</b>	<b>Reactivity: 1</b>	<b>Special provisions: No data available.</b>
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### **Hazardous combustion products**

Toxic fumes.  
Ammonia.  
Oxides of nitrogen.  
Oxides of carbon.  
Traces of incompletely burned carbon products.

### **Special fire fighting procedures**

Evacuate all personnel from danger area.  
Avoid dusting when handling and avoid all possible sources of ignition (spark or flame).  
Use water spray to cool fire-exposed containers and structures.

### **Special protective equipment for firefighters**

Self-contained breathing apparatus.  
Full protective clothing

### **Extinguishing media**

**Suitable:** - water spray  
- dry chemical

### **Unusual fire and explosion hazards**

Heated containers may explode. Once ignited, this product will burn vigorously and with acceleration.

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## 6. ACCIDENTAL RELEASE MEASURES

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### **Personal precautions**

Avoid all contact.

### **Environmental precautions**

Avoid discharge to sewers or natural waters.

### **Methods for cleaning up**

Avoid dispersion of dust.  
Eliminate sources of ignition.  
Collect in a suitable container for disposal.  
Dispose of waste material in compliance with all federal, state, and local regulations.  
Sweep up using non-sparking equipment.

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## 7. HANDLING AND STORAGE

### HANDLING

#### Handling precautions

Avoid dispersion of dust to reduce fire and explosion potential., Take precautionary measures against static discharges.

### STORAGE

#### Storage requirements

Keep away from heat, sparks and flame., Store in a cool, dry and well-ventilated area., Keep container tightly closed.

#### Further information on storage

Separate from combustible storage by 8 ft. aisles or isolate in a detached building. Do not store over 4 ft. high unless sprinklers are hydraulically designed to produce a density of 0.5 gpm/sq. ft. over the entire area., Maximum Storage Temperature., 55° C (131° F)

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Azodicarbonamide				No other exposure limits have been established
Zinc compound	USA	PEL, OSHA	5 mg/m3	Respirable fraction
		PEL, OSHA	15 mg/m3	Total dust
		TLV-TWA, ACGIH	2 mg/m3	Respirable fraction
		STEL, ACGIH	10 mg/m3	Respirable fraction

No other exposure limits have been established

### PERSONAL PROTECTION

#### Respiratory protection

In case of occurrence of dust respiratory protective equipment required.

#### Hand protection / protective gloves

Chemical resistant protective gloves

#### Eye protection

Safety glasses with side shields.

#### Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

### ENGINEERING CONTROLS

#### Ventilation

Local exhaust suggested to prevent dust buildup.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

**Physical state** Powder  
**Color** Orange-yellow  
**Odor** slightly musty

### OTHER PROPERTIES

**Boiling point** Not available

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**Melting point** 284 - 302 °F  
Decomposes

**Density** 1.78 g/cm<sup>3</sup> at 25 °C  
**Solubility in water** Slightly soluble, Decomposes in alkaline solution.

**Solubility in organic solvents** No data available.

**Flash point** Decomposes

**Thermal decomposition** Decomposes without ignition., Bulk quantities may self ignite if heated.

### 10. STABILITY AND REACTIVITY

**Stability:** This product is stable only when stored at, or below, the recommended maximum temperature.

**Incompatible materials:**

Metallic compounds  
Strong oxidizing agents.  
Acids.  
Bases.

**Hazardous reactions:** Keep away from heat.

**Hazardous combustion products:**

Toxic fumes.  
Ammonia.  
Oxides of nitrogen.  
Oxides of carbon.  
Traces of incompletely burned carbon products.

**Hazardous polymerization:** Will not occur.

### 11. TOXICOLOGICAL INFORMATION

Component data Azodicarbonamide Acute toxicity - Swallowing:	LD50 - Rat Result: 6,800 mg/kg
Component data Azodicarbonamide Acute toxicity - Skin absorption:	LD50 - Rabbit Result: > 2,000 mg/kg
Component data Azodicarbonamide Acute toxicity - Inhalation:	LC50 - Rat Result: > 200 mg/l
Component data Azodicarbonamide Skin irritation - Skin contact:	Species: Rabbit Result: Non irritating.
Component data Azodicarbonamide Eye irritation - Eye contact:	Species: Rabbit Result: Slight
Component data Azodicarbonamide Sensitization:	Species: Guinea pigs Result: Negative
Component data	Species: Human

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Azodicarbonamide Sensitization:	Result: Positive
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### MUTAGENICITY

<u>Component data</u> Azodicarbonamide <u>Genetic toxicity in vitro - Mutagenicity:</u> MUTAGENICITY	Test type: Ames bacterial assay Result: Positive
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<u>Component data</u> Azodicarbonamide <u>Genetic toxicity in vitro - Mutagenicity:</u> MUTAGENICITY	Test type: Unscheduled DNA synthesis (UDS) Result: Negative
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<u>Component data</u> Azodicarbonamide <u>Genetic toxicity in vitro - Mutagenicity:</u>	Test type: Chinese Hamster Ovary (CHO) Result: Negative
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## 12. ECOLOGICAL INFORMATION

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<u>Component ecotoxicology</u> Azodicarbonamide <u>Acute toxicity fish:</u>	EC50 - Fathead minnow (Pimephales promelas) Result: > 50 mg/l Exposure time: 48 h
<u>Component ecotoxicology</u> Azodicarbonamide <u>Acute toxicity to aquatic invertebrates:</u>	EC50 - Water flea (Daphnia magna) Result: 11 mg/l Exposure time: 48 h

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## 13. DISPOSAL CONSIDERATIONS

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**General:** Dispose of in accordance with appropriate Federal, State, and local regulations., Avoid discharge to sewers and natural waters.

**US waste**  
In accordance with EPA/RCRA 40 CFR261.21 (a) (2) Ignitability, D001.

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## 14. TRANSPORT INFORMATION

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### DOT Classification

**Proper shipping name:** Self-reactive solid Type D  
**Class:** 4.1  
**UN ID #:** UN3226

### IMDG Classification

**Proper shipping name:** Self-reactive solid Type D  
**Class:** 4.1  
**UN ID #:** UN 3226

**ICAO Classification**  
FORBIDDEN BY AIR

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## 15. REGULATORY INFORMATION

Chemical name	CAS#	Max weight %
Zinc compound	Trade secret	10.00
Zinc compound	Trade secret	5.00

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Zinc compound	Trade secret	10.00
Zinc compound	Trade secret	5.00

Massachusetts Right-To-Know Substance List (MSL)--Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Zinc compound	Trade secret	10.00
Zinc compound	Trade secret	5.00

Pennsylvania Right-To-Know Hazardous Substance List--Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Zinc compound	Trade secret	10.00
Zinc compound	Trade secret	5.00

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
Azodicarbonamide	123-77-3	
Zinc compound	Trade secret	CROM316
Zinc compound	Trade secret	CROM319

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard

### CHEMICAL INVENTORY

Canada: This product is on the DSL.  
Europe: The ingredients of this mixture are on the EINECS inventory.  
United States: This product is on the TSCA inventory.  
Australia: This product is on the AICS inventory.  
China: This product is on the IECSC Inventory.  
Japan: This product is on the ENCS inventory.  
Korea: This product is listed on the Existing Chemicals List (ECL).  
Philippines: This product is on the PICCS.

### EPA

### FDA

Food additive  
Not applicable

Food contact  
Not applicable

Cosmetics  
Not applicable

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Pharmaceuticals  
Not applicable

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## 16. OTHER INFORMATION

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FURTHER INFORMATION  
MAY BE ON THE INVENTORY LIST BUT NOT NECESSARILY REGISTERED, (Korea, China, New Zealand) CONSULT REGULATORY SPECIALIST.

### HMIS RATING

<b>Health: 2</b>	<b>Flammability: 3</b>	<b>Reactivity: 1</b>	<b>PPI: X</b>
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STP	Standard temperature and pressure
W/W	Weight/Weight 0 (HMIS)
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

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