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Material Identification

CAS Number: 9002-88-4

Grade : E5409 Low Density Polyethylene Film-4 Ply 2.5 mil. Thick

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**COMPOSITION/INFORMATION ON INGREDIENTS**

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Components

Material	CAS NUMBER	%
POLYETHYLENE RESINS	9002-88-4	>99 WT%
SILICA, CRYSTALLINE	14808-60-7	<0.25 WT%

Crystalline silica is fully bonded in polymer and therefore cannot exhibit its characteristic toxicity.

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**HAZARDS IDENTIFICATION**

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Potential Health Effects

**ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYMPTOMS**

**INGESTION:** Non-toxic. Not a likely route of exposure.

**SKIN:** At room temperature, non-toxic. Hot polymer will cause thermal burns.

**EYE:** Non-toxic. Not a likely route of exposure.

**INHALATION:** Film is not respirable. At processing temperatures above 325 degrees C., fumes irritating to the eyes, nose and throat may be produced. This

**(Hazards Identification-Continued)**

exposure may result in redness, tearing and itching of the eyes and soreness in the nose and throat, together with coughing.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CHRONIC EFFECTS: None known.

**CARCINOGENICITY INFORMATION:**

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens:

	IARC	NTP	OSHA	ACGIH
Material: Silica, Crystalline	1	X		A2

**FIRST AID MEASURES**

## First Aid

**INHALATION**

If exposed to fumes from overheating or combustion, move to fresh air.

Consult a physician if required.

**SKIN CONTACT**

If hot polymer gets on skin, cool rapidly with cold water. Do not attempt to peel from skin. Seek medical treatment.

**EYE CONTACT**

Mechanical abrasion is not a likely injury route. Consult a physician if required.

**INGESTION**

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

**FIRE FIGHTING MEASURES**

## Flammable Properties

Autoignition: est. 350 C (est. 662 F) ASTM D-1929

Combustible.

Hazardous gases/vapors produced in fire are carbon monoxide, acrolein and smoke.

## Extinguishing Media

Water, Dry Chemical, CO<sub>2</sub>

**HANDLING AND STORAGE**

Handling (Personnel): See First Aid and Protection Information Sections.

Store in a cool, dry area. Do not expose to sparks or flame.

**PHYSICAL AND CHEMICAL PROPERTIES**

## Physical Data

Boiling Point	: NA
Vapor Pressure	: NA
Vapor Density	: NA 0
Melting Point	: 118 C (244 F)
Freezing Point	: NA

## (Physical and Chemical Properties- Continued)

% Volatiles	: 0.1 wt % maximum
Evaporation Rate	: NA 0
Solubility in Water	: Insoluble
pH	: NA
Odor	: None to mild hydrocarbon
Form	: Film
Color	: Translucent to transparent
Specific Gravity	: NA
Bulk Density (Loose)	: NA
Density	: 0.92 – 0.94
Coefficient of water/oil distribution:	: NA

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**STABILITY AND REACTIVITY**

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## Chemical Stability

Stable at normal temperatures and storage conditions.

## Incompatibility with other materials

None reasonably foreseeable.

## Decomposition

Decomposition temperature: 250 C (482 F)

Hazardous gases/vapors produced are carbon monoxide, acrolein and smoke.

## Polymerization

Polymerization will not occur.

## Other Hazards

The exact nature of the decomposition product will depend upon exposure  
Conditions such as temperature, access to oxygen, flaming and presence  
other materials.

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**DISPOSAL CONSIDERATIONS**

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## Waste Disposal

Landfill or incineration in compliance with applicable federal, state/province and  
local regulations.

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**TRANSPORTATION INFORMATION**

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## Shipping Information

DOT

Proper Shipping Name: Polymeric material, hot/cold water bag.

Hazard Class: Non-hazardous

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**TOXICOLOGICAL INFORMATION**


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No information available.

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**ECOLOGICAL INFORMATION**


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**Aquatic Toxicity**

No information. Toxicity is expected to be low based on the negligible solubility in water.

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**REGULATORY INFORMATION**


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This is not a Workplace Hazard Materials Information System (WHMIS) Controlled Product.

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**EXPOSURE CONTROLS/PERSONAL PROTECTION**


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**Engineering Controls**

Provide local ventilation if processing is carried out at high temperatures

**Personal Protective Equipment**

Eye/Face : Safety glasses recommended for good safety practice.  
 Protective Gloves : Wear gloves and a long-sleeved shirt when handling hot film.

**Exposure Guidelines**
**Exposure Limits**
**Polyolefin Film**

PEL (OSHA) : None established  
 TLV (ACGIH) : None established  
 AEL \*(Dupont) : 10 mg/m<sup>3</sup>, 8 & 2 Hr. TWA, total dust  
 5 mg/m<sup>3</sup>, 8 & 12 Hr. TWA, respirable dust

**Other Applicable Exposure Limits**
**Silica, Crystalline**

PEL (OSHA) : Total dust (30mg/m<sup>3</sup> - % SI02 +2)  
 Respirable dust (10 mg/m<sup>3</sup> - % SI02)  
 TLV (ACGIH) : .05 mg/m<sup>3</sup>, respirable dust, 8 Hr. TWA, A2  
 Notice of Intended Changes (2005)  
 0.025 mg/m<sup>3</sup>, respirable dust, 8 Hr. TWA, A2  
 AEL \*(Dupont) : 0.1 mg/m<sup>3</sup>, 8 Hr. TWA, respirable dust  
 0.05 mg/m<sup>3</sup>, 12 Hr. TWA, respirable dust

\*AEL is Dupont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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OTHER INFORMATION

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Additional Information

NA = Not applicable

NE = Not established

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

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This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.