



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

Index #: FF200.01

Date Issued: May 15, 2008  
Revision Date: May 15, 2008  
Supercedes: Index #: 401.96

### POLYETHYLENE FILM

#### Section 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** WHITE/CLEAR POLYETHYLENE FILM

Dura-Film®; Milrol®; Thermax; Milrol-2000; CCA; Lastic-Tube®; Agripac®;

**Company Address:** AT Films  
4605-101 Avenue  
P.O. Box 428  
Edmonton, Alberta, Canada  
T5J 2K1

Tel: (780) 468-0800  
Web: [www.atfilmsinc.com](http://www.atfilmsinc.com)

**Product Use:** Agricultural and Horticultural Films

#### Section 2 HAZARDS IDENTIFICATION

##### Emergency Overview:

**Appearance:** Product is white or clear film. No odour.

**Caution:** This material is combustible and will burn in fire and emit irritating smoke. Heat – released air emissions may be irritating to the eyes, skin and respiratory system. The film may create a slipping hazard. Molten film can cause severe thermal burns.

This product is not considered hazardous by the OSHA Hazard Communication standard, 29 CFR 1910.1200.

This product is not a controlled product under Canadian WHMIS regulations.

This product is not regulated as a hazardous material for transportation.

##### Potential Health Effects:

**Inhalation:** Inhalation is impossible due to its physical nature.

**Eyes:** Irritation or corneal injury due to mechanical action.

**Skin:** Prolonged contact is essentially non-irritating to skin. No adverse effects anticipated by skin absorption.

**Ingestion:** Ingestion is impossible due to its physical nature. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small pieces. May cause choking if swallowed.

Transportation Emergency:  
780-468-0800

Page 1 of 8

Product Information/Customer Service:  
780-468-0800

12/11/2008:09 PM



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

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### POLYETHYLENE FILM

#### Section 3 COMPOSITION/ INFORMATION ON INGREDIENTS

**Chemical Name:** Polyethylene (Ethene Homopolymer)

**Chemical Family:** Polymer

**Base Resin CAS#:** 9002-88-4

**Molecular Formula:**  $[-CH_2CH_2-]_n$

The product may contain varying levels of proprietary chemical additives.

#### Section 4 FIRST AID MEASURES

Solid product is neither an irritant nor gives off hazardous vapours at ambient temperatures.

**Eyes:** The material is non-irritating upon contact, except upon impact as any foreign particle in the eye.

**Skin:** Not a hazard at ambient conditions.

**Ingestion:** Material is not expected to cause an ingestion problem. No first aid procedures are required. If necessary, get medical advice. Treat symptomatically.

**Inhalation:** Inhalation is unlikely due to physical form.

#### Section 5 FIRE FIGHTING MEASURES

**Flammable Properties:**

**Flash Point:** Not Applicable

**Flash Point Method:** Not Applicable

**Upper Flammability Limit:** Not Applicable

**Lower Flammability Limit:** Not Applicable

**Autoignition Temperature:** 330°C – 410°C (Estimated)

Under fire conditions, the film will readily burn and emit a heavy, irritating smoke. Do not permit dust to accumulate, as high concentrations of airborne dust may form explosive mixture with air. May accumulate static charge.

Combustion products may include and are not limited to carbon monoxide, carbon dioxide.

**Extinguishing Media:** Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers and foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred.

**Transportation Emergency:**  
780-468-0800

Page 2 of 8

**Product Information/Customer Service:**  
780-468-0800

12/11/2008:09 PM



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

Index #: FF200.01

Date Issued: May 15, 2008  
Revision Date: May 15, 2008  
Supercedes: Index #: 401.96

### POLYETHYLENE FILM

**Fire Fighting Instructions:** Keep unnecessary personnel away. Soak thoroughly with water to cool and prevent re-ignition.  
If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents.

**Protective Equipment for Fire Fighters:** Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots and gloves).

### Section 6 ACCIDENTAL RELEASE MEASURES

#### **In the event of an Accidental Release:**

**Personal Protection:** Isolate area. Extinguish or remove possible ignition sources. Collect rolls for inspection for re- use or disposal.

**Environmental Protection:** Prevent rolls from entering ditches, sewers, waterways.

### Section 7 HANDLING AND STORAGE

Avoid high temperatures, sparks, open flames and all other sources of ignition. Two persons and/or proper handling equipment may be required to handle long rolls. Static discharge may occur while unwinding film.

**Storage Temperature (°C):** Ambient temperatures.

**Storage Requirements:** Should be stored under cover to prevent degradation due to sunlight. Do not damage end of rolls.

**Shelf Life:** Maximum of five years, if stored properly.

Transportation Emergency:  
780-468-0800

Page 3 of 8

Product Information/Customer Service:  
780-468-0800

12/11/2008:09 PM



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

Index #: FF200.01

Date Issued: May 15, 2008  
Revision Date: May 15, 2008  
Supercedes: Index #: 401.96

### POLYETHYLENE FILM

#### Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines:** None normally required, as products are used outdoors. The following exposure limits for particulates (insoluble), not otherwise regulated, are given for informational purposes only.

ACGIH: 10 mg/m<sup>3</sup> TWA (inhalable particles); 3 mg/m<sup>3</sup> TWA (respirable particles) [related to Particulates (insoluble or poorly soluble) not otherwise specified (PNOS)].

OSHA: 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/M<sup>3</sup> TWA (respirable fraction) (related to Particulates not otherwise regulated).

**Engineering Controls:** None normally required.

#### **Personal Protective**

**Equipment:** **Eyes/Face:** None normally required.  
**Skin Protection:** None normally required.  
**Respiratory Protection:** None normally needed.

#### Section 9 PHYSICAL AND CHEMICAL PROPERTIES

|  |                             |
|--|-----------------------------|
| <b>Physical State/Appearance:</b>            | Solid film                  |
| <b>Odour:</b>                                | None                        |
| <b>Odour Threshold:</b>                      | Not Available               |
| <b>pH:</b>                                   | Not Applicable              |
| <b>Melting Point:</b>                        | 90°C - 125°C                |
| <b>Boiling Range:</b>                        | Not Applicable              |
| <b>Flash Point:</b>                          | Not Applicable              |
| <b>Evaporation Rate:</b>                     | Not Applicable              |
| <b>Upper/Lower Flammability Limits:</b>      | Not Applicable              |
| <b>Vapour Pressure:</b>                      | Not Applicable              |
| <b>Vapour Density:</b>                       | Not Applicable              |
| <b>Bulk Density:</b>                         | 560 – 600 kg/m <sup>3</sup> |
| <b>Solubility:</b>                           | Not soluble in water        |
| <b>Partition Coefficient: Octanol/Water:</b> | Not Applicable              |
| <b>Auto-Ignition Temperature:</b>            | > 330°C                     |
| <b>Decomposition Temperature:</b>            | > 300°C                     |
| <b>% Volatiles by Volume:</b>                | Negligible                  |

Transportation Emergency:  
780-468-0800

Page 4 of 8

Product Information/Customer Service:  
780-468-0800

12/11/2008:09 PM



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

Index #: FF200.01

Date Issued: May 15, 2008  
Revision Date: May 15, 2008  
Supercedes: Index #: 401.96

### POLYETHYLENE FILM

#### Section 10

#### STABILITY AND REACTIVITY

**Chemical Stability:**

Stable under ambient conditions

**Conditions to Avoid:**

Avoid exposing films to temperatures over 300°C.

**Incompatible Materials:**

Organic solvents may partially dissolve and degrade the films.

**Hazardous Decomposition Products:**

Decomposition products include carbon dioxide, carbon monoxide and small amounts of other organic vapours. Inhalation of these decomposition products may be hazardous.

**Hazardous Polymerization:**

Will not occur.

#### Section 11

#### TOXICOLOGICAL INFORMATION

**Acute Toxicity:**

**General Information:** Material is considered biologically inert.

**Chronic Toxicity:**

**Carcinogenicity Data:** Carbon black is classified by IARC as possibly carcinogenic to humans (Group 2B). However, the carbon black is bound within the polymer matrix, and the exposure is to fine carbon black is unlikely.

**Reproductive Effects:** There is no reported data.

**Mutagenicity Data:** There is no reported data.

**Synergistic Materials:** There is no reported data.

**Other Health Effects:** None known.

#### Section 12

#### ECOLOGICAL INFORMATION

**Ecotoxicity:** The material is biologically inert and non-toxic.

**Persistence/Degradability:** It is stable in aquatic systems or in a landfill.

**Transportation Emergency:**  
780-468-0800

Page 5 of 8

**Product Information/Customer Service:**  
780-468-0800

12/11/2008 2:09 PM



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

**Index #: FF200.01**

**Date Issued: May 15, 2008**  
**Revision Date: May 15, 2008**  
**Supercedes: Index #: 401.96**

### **POLYETHYLENE FILM**

**Bioaccumulation/Accumulation:** The film may accumulate in the digestive systems, if ingested by fish or wildlife.

Cont'd

**Mobility:** If released into aquatic systems, the product will float and it will flow with the water current. The product should be recovered from water.

**Deactivating Chemicals:** None required.

### **Section 13**

### **DISPOSAL CONSIDERATIONS**

The product is not a hazardous waste according to US RCRA and Canadian CEPA Regulations.

**Waste Disposal Methods:** Dispose of waste material at a suitable landfill site, or at an approved waste incineration facility in accordance with applicable local, provincial, state, and federal regulations.

For unused product, the preferred options include sending to a licensed recycler, reclaimer.

### **Section 14**

### **TRANSPORT INFORMATION**

**Not Regulated**

### **Section 15**

### **REGULATORY INFORMATION**

Polyethylene (CAS #9002-88-4) and all the ingredients in the grades are all listed in the following chemical inventories:

- USA – TSCA
- Canada – DSL

WHMIS Classification:  
Ozone Depleting Substances:

Manufactured article. Not controlled.  
Complies with Clean Air Act Amendment of 1990

### **Section 16**

### **OTHER INFORMATION**

#### **INFORMATION SOURCES**

1. Supplier's Material Safety Data Sheets
2. RTECS, Registry of Toxic Effects of Chemical Substances, Database via the Scientific and Technical Information Network (STN).
3. CHEMpendium™ CD-ROM produced by Canadian Centre for Occupational Health and Safety

**Transportation Emergency:**  
**780-468-0800**

**Page 6 of 8**

**Product Information/Customer Service:**  
**780-468-0800**

**12/11/2008 2:09 PM**



# MATERIAL SAFETY DATA SHEET

## AT Films Inc.

Index #: FF200.01

Date Issued: May 15, 2008  
Revision Date: May 15, 2008  
Supercedes: Index #: 401.96

### POLYETHYLENE FILM

4. CHEMLIST – Regulated Chemical Listing, Database via Scientific and Technical Information Network (STN)

This MSDS has been prepared to the standards and guidelines presented in ANSI® Z400.01-2004

Revision History: New MSDS

#### Legend:

|        |   |
|--------|---|
| AFFF   | Aqueous Film Forming Foam   |
| AICS   | Australian Inventory of Chemical Substances                           |
| CAS#   | Chemical Abstracts Service Registry Number                            |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR    | Code of Federal Regulations   |
| DOT    | Department of Transportation  |
| DSL    | Domestic Substances List  |
| ECL    | Existing Chemicals List   |
| EINECS | European Inventory of Existing Commercial Chemical Substances         |
| EPA    | Environmental Protection Agency                                       |
| HMIS   | Hazardous Materials Identification System                             |
| MSHA   | Mine Safety and Health Administration                                 |
| NIOSH  | National Institute for Occupational Safety and Health                 |
| OSHA   | Occupational Safety and Health Administration                         |
| PICCS  | Philippines Inventory of Chemicals and Chemical Substances            |
| RCRA   | Resource Conservation and Recovery Act                                |
| SARA   | Superfund Amendments and Reauthorization Act of U.S. EPA              |
| TC     | Transport Canada  |
| TDG    | Transportation of Dangerous Goods Act/Regulations                     |
| TLV    | Threshold Limit Value   |
| TSCA   | Toxic Substances Control Act  |
| TWA    | Time-Weighted Average   |
| WHMIS  | Workplace Hazardous Materials Information System                      |

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and AT Plastics Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

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Transportation Emergency:  
780-468-0800

Page 7 of 8

Product Information/Customer Service:  
780-468-0800

12/11/2008:09 PM



**MATERIAL SAFETY DATA SHEET**  
**AT Films Inc.**

**Index #: FF200.01**

**Date Issued: May 15, 2008**  
**Revision Date: May 15, 2008**  
**Supersedes: Index #: 401.96**

**POLYETHYLENE FILM**

**Transportation Emergency:**  
**780-468-0800**

**Page 8 of 8**

**Product Information/Customer Service:**  
**780-468-0800**

**12/11/2008 2:09 PM**