

# 518 / HS8171

## Vacuum bagging film



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Health and Safety at Work - Control of Substances Hazardous to Health  
Material Safety Data Sheet

MSDS No: CAPRAN518 / HS8171

### 1) Chemical Product and Company Identification

PRODUCT NAME: CAPRAN® Heat Stabilized Nylon 6 Films  
OTHER/GENERIC NAMES: Polyamide Resin Blend CAPRAN® 512LL, 518LL  
FORM: Plastic Film.  
PRODUCT USE: Vacuum Bagging Film.

MANUFACTURER/DISTRIBUTOR: Aerovac Systems Ltd  
500 Bradford Road  
Sandbeds  
Keighley  
West Yorkshire  
BD20 5NG  
England

For more information call +44 (0) 1274 550500 (Mon - Thurs 8:30-17:00, Fri 8:30-13:45).

### 2) Composition/Information on Ingredients

Ingredient Name	CAS Number	Weight %
Nylon 6	25038-54-4	50-90%
Proprietary resin	Trade Secret	8-48%
Colorants	N/A.	0-2%
Caprolactum	105-60-2	-1%

Trace impurities and additional material names not listed above may also appear in Section 15 toward the end of the MSDS. These materials may be listed for local "Right-to-know" compliance and for other reasons.

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### 3) Hazards Identification

**EMERGENCY OVERVIEW:** A clear or coloured plastic film. Not considered hazardous under normal usage. Can release irritating and/or toxic vapours at elevated processing temperatures or if involved in a fire.

Potential Health Hazards:

**SKIN:** Vapour from heated film may be irritating to skin.

**EYES:** Vapour from heated film may be irritating to eyes.

**INHALATION:** Inhalation of high concentrations of vapour from heated film may cause pulmonary symptoms.

**INGESTION:** None.

**DELAYED EFFECTS:** None known.

Ingredients found on one of the OSHA designated carcinogen lists are listed below:

INGREDIENT NAME	NTP STATUS	IARC STATUS	OSHA LIST
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No ingredients listed in this section.

### 4) First Aid Measures

**SKIN:** None needed.

**EYES:** None needed under normal usage. If material comes into contact with the eye, flush eyes with water while holding eyelids apart to ensure complete irrigation.

**INHALATION:** None needed under normal usage. If exposed to vapors at elevated processing temperatures, remove to fresh air.

**INGESTION:** None needed.

**ADVICE TO PHYSICIAN:** None.

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## 5) Flammable Properties

FLASH POINT: N/A.

FLASH POINT METHOD: N/A.

AUTO IGNITION TEMPERATURE: Not determined..

UPPER FLAME LIMIT (vol. % in air): N/A. Non-volatile solid.

LOWER FLAME LIMIT (vol. % in air): N/A. Non-volatile solid.

FLAME PROPAGATION RATE (solids): Not determined.

OSHA FLAMMABILITY CLASS: Not determined.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water or other agents as appropriate for materials in surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Molten film at higher temperatures can ignite and will burn.

SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS: Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

## 6) Accidental Release Measures

IN CASE OF SPILL OR OTHER RELEASE: (Always wear recommended personal protective equipment.) Collect and place in a solid waste container.

Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

## 7) Handling and Storage

NORMAL HANDLING: (Always wear recommended personal protective equipment.) Use normal personal hygiene and good housekeeping.

STORAGE RECOMMENDATIONS: Store in a cool, dry area, away from direct heat or sunlight.

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### 8) Exposure Controls/Personal Protection

**ENGINEERING CONTROLS:** General room ventilation plus local exhaust at points of fume generation to maintain exposure below the PEL/TLV exposure limits.

#### PERSONAL PROTECTIVE EQUIPMENT

**SKIN PROTECTION:** Not normally required. Use heat resistant gloves if handling melted material.

**EYE PROTECTION:** As a general practice in manufacturing areas, safety glasses that conform to ANSI Z87.1 should be worn.

**RESPIRATORY PROTECTION:** Under normal usage, not normally required. A NIOSH/MSHA approved respirator should be worn in areas where the PEL/TLV is exceeded.

**ADDITIONAL RECOMMENDATIONS:** None.

#### EXPOSURE GUIDELINES

INGREDIENT NAME	ACGIH TLV	OSHA PEL	OTHER LIMIT
Caprolactam (vapor)	TWA = 5 ppm (23 mg/m <sup>3</sup> ) STEL = 10 ppm (46 mg/m <sup>3</sup> )	TWA = 5 ppm (20 mg/m <sup>3</sup> ) STEL = 10 ppm (40 mg/m <sup>3</sup> )	N/A

\* = Limit established by Honeywell for internal use.

\*\* = Workplace Environmental Exposure Level (AIHA).

\*\*\* = Biological Exposure Index (ACGIH).

**OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:** None.

### 9) Physical and Chemical Properties

**APPEARANCE:** Clear or colored plastic film.

**PHYSICAL STATE:** Solid.

**ODOR:** None.

**SPECIFIC GRAVITY (water = 1.0):** 1.13-1.14

**SOLUBILITY IN WATER (weight %):** Negligible.

**pH:** Not applicable.

**BOILING POINT:** Not applicable.

**MELTING POINT:** 420-485°F (215-250°C)

**VAPOR PRESSURE:** Negligible at room temperature.

**VAPOR DENSITY (air = 1.0):** Not determined.

**EVAPORATION RATE:** Not determined.

**COMPARED TO:** Not applicable.

**% VOLATILES:** Negligible.

**FLASH POINT:** Not applicable.

(Flash point method and additional flammability data are found in Section 5.)

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## 10) Stability and Reactivity

### NORMALLY STABLE? (CONDITIONS TO AVOID):

Normally stable. Avoid exposure to open flame or temperatures exceeding recommended processing temperatures. The maximum temperature to which the film can be exposed will vary with exposure (dwell) time. Honeywell should be contacted if questions arise concerning specific processing conditions.

### INCOMPATIBILITIES:

Strong oxidizers.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may include caprolactam, ammonia, hydrogen cyanide, carbon monoxide, carbon dioxide and combustion by-products (oxidized and non-oxidized hydrocarbons).

### HAZARDOUS POLYMERIZATION:

Will not occur.

## 11) Toxicological Information

IMMEDIATE (ACUTE) EFFECTS: Not determined.

DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS: None known.

OTHER DATA: None.

## 12) Ecological Information

Material is considered inert and not expected to be biodegradable or toxic.

## 13) Disposal Considerations

RCRA

Is the unused product a RCRA hazardous waste if discarded? No.

If yes, the RCRA ID number is: Not applicable.

### OTHER DISPOSAL CONSIDERATIONS:

Dispose of in compliance with Federal, state and local government regulations. Usually considered an inert packaging material that can be recycled or landfilled.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

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#### 14) Transport Information

US DOT HAZARD CLASS: Not regulated.

US DOT ID NUMBER: Not applicable.

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

#### 15) Regulatory Information

TOXIC SUBSTANCES CONTROL ACT (TSCA)

TSCA INVENTORY STATUS: All components are listed on the TSCA Inventory.

OTHER TSCA ISSUES: None.

SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

INGREDIENT NAME SARA/CERCLA RQ (lb) SARA EHS TPQ (lb)

No ingredients listed in this section.

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center (1-800-424-8802) and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS: None.

The following ingredients are SARA 313 "Toxic Chemicals". CAS numbers and weight percents are found in Section 2.

INGREDIENT NAME COMMENT

No ingredients listed in this section.

STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

INGREDIENT NAME	WEIGHT %	COMMENT
Caprolactam (105-60-2)	<0.90 Fla.	Toxic Subs. Right-to-Know. Ill. Toxic Subs. Disclosure to Emp. Act. La. Right-to-Know Reporting List. Mass. Right-to-Know Substance List. N. J. Right-to-Know Substances. Pa. Right-to-Know Haz. Substances. R. I. Haz. Subs. Right-to-Know Act.

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**ADDITIONAL REGULATORY INFORMATION:**

This product is not intended to be used in any application which places the product in direct contact with the human body, or in other FDA governed applications, unless specifically designated otherwise in written material supplied by Honeywell to the purchaser.

**WHMIS CLASSIFICATION (CANADA):**

Not a controlled substance. (Considered to be a manufactured article.)

**FOREIGN INVENTORY STATUS:**

All base monomers and other components are listed on the EINECS Inventory.

**16) Other Information**

CURRENT ISSUE DATE: May 2010

PREVIOUS ISSUE DATE: April 2000

**CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:**

Change in company name and contact information (Section 1) and insertion of additional regulatory information (Section 15).

OTHER INFORMATION: None.

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