

SEP-27-02 16:22 FROM:HUNT/CUST.SERVICE

ID:7048710116

PAGE 3/7

{ 9533-00
-01 }
-07 }
-26 }

23402-1009 -1205
-1201 -1304
-1202 -1340

Rev'd 09-27-02
Hunt Graphics Americas Corporation
Railroad Avenue Extension, Building 8
P.O. Box 98
Beacon Falls, Connecticut 06403-0098 USA
Telephone: (203) 725-5201
Facsimile: (203) 725-5639

Huntgraphics

MATERIAL SAFETY DATA SHEET

Page 1

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT: FUSION 4000 (DAF 801 Polyolefin Adhesive Film)

Effective date: 03/02/99

Date Printed: 04/06/99

2. COMPOSITION INFORMATION ON INGREDIENTS

Polyethylene	CAS# 009002-88-4	
Copolymer of ethylene and acrylic acid	CAS# 009010-77-9	
Copolymer of ethylene and vinyl acetate	CAS# 024937-78-8	
Copolymer of ethylene and butene - 1	CAS# 009019-29-8	0 - 4%
(Total polymer content)		>85.0%)
Silicon Dioxide	CAS# 007631-86-9	>0.1-<1%
	CAS# 014464-46-1	
	CAS# 068855-54-9	

In specifically designated colors, this film may contain commercially available dyes and pigments, generally at levels less than 1%, but sometimes at levels greater than 1%, but sometimes at levels greater than 1% for titanium dioxide (CAS# 013463-67-7), carbon black (CAS# 001000-86-4), or ferric oxide (e.g., CAS# 001309-37-1).

V 2260

3. HAZARDS IDENTIFICATION

* Color: Colored Appearance: Film Odor: Odorless *
* Toxic fumes are released in fire situations *

POTENTIAL HEALTH EFFECTS (See Section 11 for Toxicological data.)

- EYE: Eye contact is unlikely due to physical state.
- SKIN: Essentially non-irritating to skin. Skin absorption is unlikely due to physical properties.
- INGESTION: Single dose oral toxicity is believed to be very low. No hazards anticipated from ingestion incidental to industrial exposure.
- INHALATION: Vapors unlikely due to physical properties.
- SYSTEMIC & OTHER EFFECTS: No specific data available. However, repeated exposures are not anticipated to cause significant adverse effects. Additives are encapsulated in the product and are expected to be released under normal processing conditions.

Material Safety Data Sheet

Page 2

4. FIRST AID

- EYE:** Flush eyes with plenty of water; mechanical effects only.
- SKIN:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.
- INGESTION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.
- INHALATION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

- FLASH POINT:** Not Applicable
MEAN HOD USED: Not Applicable
AUTOIGNITION TEMPERATURES: Not Applicable

FLAMMABILITY LIMITS

- LFL:** Not Applicable
UFL: Not Applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions polymers decompose. The smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to: aldehydes, organic acids, hydrocarbons, carbon monoxide, carbon dioxide.

OTHER FLAMMABILITY INFORMATION: Dense smoke is emitted when burned without sufficient oxygen.

EXTINGUISHING MEDIA: Water, carbon dioxide, dry chemical.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Cool surroundings with water to localize fire zone. Soak thoroughly with water to cool and prevent re-ignition.

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). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

- PROTECT PEOPLE:** Clear non-emergency personnel from area.
- PROTECT THE ENVIRONMENT:** Avoid contamination of drinking water, natural water, ground water or any waterway.
- CLEANUP:** Sweep up.

Material Safety Data Sheet

Page 3

7. HANDLING AND STORAGE

HANDLING: Mechanical handling equipment can cause formation of dusts. Maintain good housekeeping. Layers of flammable dusts should not be permitted to accumulate.

STORAGE: Recommend storing in a cool dry place away from high temperatures, hot pipes and direct sun.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations, including hot wire coating.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:	Use safety glasses
SKIN PROTECTION:	No skin protection should be needed.
RESPIRATORY PROTECTION:	No respiratory protection should be needed.

EXPOSURE GUIDELINE (S): Although some of the additives used in this product may have exposure guidelines, these additives are encapsulated in the product and no exposure would be expected under normal handling conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Plastic film; clear or translucent
ODOR:	Odorless
VAPOR PRESSURE:	Not Applicable
VAPOR DENSITY:	Not Applicable
BOILING POINT:	Not Applicable
SOLUBILITY IN WATER:	Not Applicable
SPECIFIC GRAVITY:	Not Applicable

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

CONDITIONS TO AVOID: Products can decompose at elevated temperatures. Avoid direct sunlight.

INCOMPATIBILITY WITH OTHER MATERIALS: None Known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to: hydrocarbons, carbon monoxide, carbon dioxide, acetaldehyde and organic acids.

HAZARDOUS POLYMERIZATION: Will not occur.

Material Safety Data Sheet

Page 4

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects.)

SKIN: Dermal LD50 has not been determined.

INGESTION: Oral LD50 has not been determined.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

MOVEMENT AND PARTITIONING: No bioconcentration is expected because of high molecular weight (mw >1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

DEGRADATION & TRANSFORMATION: This water insoluble polymeric solid is expected to be inert in the environment. Surface photo-degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY: Not expected to be acutely toxic.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. HUNT GRAPHICS AMERICAS HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device and landfill.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive—selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

Material Safety Data Sheet

Page 5

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

REGULATORY INFORMATION (CONTINUED)

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category.

This product has been determined to be an article under the definitions included in the OSHA Hazard Communication Standard (29 CFR 1910.1200) and Sara Title III Section 313 (40 CFR 372.3).

TOXIC SUBSTANCES CONTROL ACT (TSCA)

All ingredients are on the TSCA are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (N.F.P.A.) RATINGS:

Health	0
Flammability	1
Reactivity	0

MSDS STATUS: Revised to 16 section format.

Fusion 4000.doc