

MATERIAL SAFETY DATA SHEET



VAC-PAK[®] UHT-750

1. PRODUCT AND COMPANY NAME

PRODUCT NAME: VAC-PAK[®] UHT-750

DESCRIPTION: Ultra High Temperature Bagging Film for Polyimide and Bismaleimide Systems

MANUFACTURER: Richmond Aircraft Products
13503 Pumice Street
Norwalk, CA 90650

FOR MORE INFORMATION CALL: 562-404-2440
IN CASE OF EMERGENCY CALL: 562-404-2440

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>CAS #</u>	<u>% of Ingredient</u>
Alumina	(CAS 1344-28-1)	0-35%
CB, XC, XC600, FPC-C, MTB, PST-C contain:		
Carbon Black	(CAS 133-86-4)	0-30%
Exposure limits for the following may apply:		
Dimethyl Acetamide (residual film)	(CAS 127-19-5)	<1%

MATERIAL SAFETY DATA SHEET



3. HAZARD IDENTIFICATION

POTENTIAL HEALTH HAZARDS

Route of Entry:	N/A
Target Organs:	N/A
Inhalation:	Not a probable route of exposure for film. Exposure to alumina or carbon black encapsulated in the polymer is not likely. For the polymer from which the film is made, RAP recommends treating polymer dust as a nuisance dust.
Skin Contact:	No irritation is expected from handling film. Less than 1 ppm dimethyl acetamide was extracted from film by distilled water at 40C for 4 hours.
Eye Contact:	Not a probable route of exposure for film.
Ingestion:	Not a probable route of exposure for film.

4. FIRST AID MEASURES

Inhalation:	Not a probable route of exposure for films.
Skin Contact:	Wash with soap and water after handling. If skin irritation develops, consult a physician.
Eye Contact:	If material comes into contact with the eye, flush eyes with water while holding eyelids apart to ensure complete irrigation.
Ingestion:	Not a probable route of exposure for films.

MATERIAL SAFETY DATA SHEET



5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point (Method Used): N/A

LEL: N/A

UEL: N/A

Extinguishing Method: Water, foam, dry chemical, CO2

Special Fire Fighting Procedures: None required

Unusual Fire and Explosion Hazards: Not a fire or explosion hazard. The flammability characteristic of polyimide film is reported as “self-extinguishing”. Material chars but does not burn in air. Material will burn in an atmosphere of 100% oxygen. The major off-gases are carbon dioxide and carbon monoxide. The processing of the material polyimide films can cause the generation of static charge. Precautions for static charges should also be taken when removing plastic films used as protective packaging for material.

6. ACCIDENTAL RELEASE MEASURES

Always wear recommended personal protective equipment. Collect and place in a solid waste container.

7. HANDLING AND STORAGE

Handling Precautions: Use normal personal hygiene and good housekeeping

Storage Requirements: Store away from flammable material

MATERIAL SAFETY DATA SHEET



8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: Safe handling of material polyimide films at high temperatures (above 200C) requires adequate ventilation. If small quantities of material are involved, normal air circulation may be all that is needed in case of overheating. Whether or not existing ventilation is adequate at higher temperatures will depend on the combined factors of film quantity, temperature and exposure time.

Protective Equipment: Safety glasses and gloves are recommended as good industrial practice.

Exposure Guideline/Other:

Alumina

PEL (OSHA) 15 mg/m³, total dust, 8 Hr. TWA
5 mg/m³, respirable dust, 8 Hr. TWA
TLV (ACGIH) 10 mg/m³, total dust, 8 Hr. TWA, A4

Carbon Black

PEL (OSHA) 3.5 mg/m³, 8 Hr. TWA
TLV (ACGIH) 3.5 mg/m³, 8 Hr. TWA, A4

Dimethyl Acetamide (residual in film)

PEL (OSHA) 10 ppm, 35 mg/m³, 8 Hr. TWA, Skin
TLV (ACGIH) 10 ppm, 36 mg/m³, 8 Hr. TWA, Skin, A4

Polyimide Polymer

PEL (OSHA) None Established
TLV (ACGIH) None Established

MATERIAL SAFETY DATA SHEET



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light amber plastic film
Physical Status:	Solid
Odor:	No odor
pH:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Boiling Point:	N/A
Freezing/Melting Point:	N/A
Solubility:	Insoluble
Spec. Grav./Density:	>1.4

10. STABILITY AND REACTIVITY

Stability:	Normally Stable
Conditions to avoid:	None reasonably foreseeable
Materials to avoid (Incompatibility):	None reasonably foreseeable
Hazardous Decomposition Products:	At temperatures above 400C, the major off-gases are carbon monoxide and carbon dioxide.
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

Immediate (Acute) Effects:	Not determined
Delayed (Sub-chronic and chronic) Effects:	None known
Other Data:	

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

<u>Material</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>	<u>ACGIH</u>
Carbon Black	2B			

MATERIAL SAFETY DATA SHEET



12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

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

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.

MATERIAL SAFETY DATA SHEET



15. REGULATORY INFORMATION

State Regulations (US)

State Right-To-Know

No substances on the state hazardous substance list, for the states indicated below are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated.

Substances on the Pennsylvania hazardous substances list present at a concentration of 1% or more (0.01% for some special hazardous substances):

- Dimethyl Acetamide (1% maximum)
- Some types contain carbon black (2-30%)
- Some types contain alumina (35% maximum)

Warning, substance known to the state of California to cause cancer, birth defects or other reproductive harm:

None

Substances on the New Jersey workplace hazardous substances list present at a concentration of 1% or more (0.1% for substance identified as carcinogens, mutagens or terratogens):

- Dimethyl Acetamide (1% maximum)
- Some types contain carbon black (2-30%)
- Some types contain alumina (35% maximum)

16. OTHER INFORMATION

Current Issue Date: 06/17/2009

Previous Issue Date: 02/19/2008