*** Section 1 - Chemical Product and Company Identification ***

Product Use: Food packaging
Other Designations: PETEWICH®, RPET
PETEWICH™ is a registered trademark of Ultra Pac, Inc.

MULTI PLASTICS, INC.  Phone: 740-548-4894
7770 N Central Drive  Fax: 740-548-5177
Lewis Center, OH 43035

Manufacturer/Supplier
Multi-Plastics Extrusion
600 Dietrich Ave.
Hazleton, Pa. 18201

Emergency Information:  USA: Chemtrec: 1-800-424-9300 or 1-703-527-3887

*** Section 2 - Hazards Identification ***

EMERGENCY OVERVIEW
Solid, sheet or pellets. Clear or various colors. Odorless. Material will burn if ignited. Dust clouds generated during processing may be explosive.
Dust from processing can cause mechanical irritation of the eyes, skin and upper respiratory tract. Contact with molten polymer can cause thermal burns.

POTENTIAL HEALTH EFFECTS
The following statements summarize the health effects generally expected in cases of overexposures. User specific situations should be assessed by a qualified individual. Additional health information can be found in Section 11. The health effects listed below are not likely to occur unless processing or recycling/combustion generate dusts or fumes.

Eyes: Dust from processing: Can cause mechanical irritation.

Skin
Dust from processing: Can cause mechanical irritation.
Molten polymer: Contact with molten polymer can cause thermal burns.

Inhalation: Dust from processing: Can cause irritation of upper respiratory tract.

Carcinogenicity and Reproductive Hazard
Product as shipped: Does not present any cancer or reproductive hazards. Dust from processing: Can present a cancer hazard (carbon black, titanium dioxide). Does not present any reproductive hazards.

Medical Conditions Aggravated By Exposure to Product, Components or Compounds Formed During Processing
Dust from processing: Asthma, chronic lung disease, and skin rashes.

*** Section 3 - Composition / Information on Ingredients ***

Complete composition is provided below and may include some components classified as non-hazardous.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>25038-59-9</td>
<td>Polyethylene terephthalate</td>
<td>&gt;99</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>Carbon black</td>
<td>&lt;2</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
<td>&lt;0.3</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Product Name: APET SHEET CLEAR AND COLORS

*** Section 4 - First Aid Measures ***

First Aid: Eyes
Dust from processing: Flush eyes with plenty of water or saline for at least 15 minutes. Consult a physician.

First Aid: Skin
Dust from processing: Wash skin with soap and water for at least 15 minutes. Consult a physician if irritation persists. Molten polymer: If molten material gets on skin, cool rapidly with cold water. Do not attempt to peel material from skin. Get medical treatment for thermal burns.

First Aid: Inhalation
Dust from processing: Remove to fresh air. If unconscious or severely injured, check for clear airway, breathing and presence of pulse. Perform CPR if there is no pulse or respiration. Consult a physician.

*** Section 5 - Fire Fighting Measures ***

Flammable/Combustible Properties
While not considered "flammable" or "combustible" as defined by OSHA or DOT, the material will burn if ignited.

Fire/Explosion: Dust or fines dispersed in the air can be explosive.

Extinguishing Media
Use dry chemical, water spray (fog), alcohol-resistant foam or carbon dioxide extinguishing agents. Manual fire fighting may be difficult due to the presence of thick smoke.

Fire Fighting Equipment/Instructions
Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

*** Section 6 - Accidental Release Measures ***

Small/Large Spill: Collect scrap for recycling.

*** Section 7 - Handling and Storage ***

Handling/Storage
Avoid generating dust. Keep material off floors and walkways. Pellets can lead to serious, same level slips and falls. Store away from heat, sparks, flames, oxidizers, and other incompatible substances.

Requirements for Processes Which Generate Dusts or Fines
If processing of these products includes operations where dust or extremely fine particulate is generated, obtain and follow the safety procedures and equipment guides contained in the National Fire Protection Association (NFPA) brochure listed in Section 16.
Local ventilation and vacuum systems must be designed to handle explosive dusts. Dry vacuums and electrostatic precipitators must not be used.

*** Section 8 - Exposure Controls / Personal Protection ***

Engineering Controls
If dust or fumes are generated through processing: Use with adequate explosion-proof ventilation to meet the limits listed in Section 8, Exposure Guidelines.

Personal Protective Equipment
Respiratory Protection
If dust or fumes are generated through processing: Use NIOSH-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional. Suggested respiratory protection: N95

Eye Protection
Wear safety glasses/goggles to avoid eye injury.

Skin Protection
Wear appropriate gloves to avoid any skin injury.
Material Safety Data Sheet

Product Name: APET SHEET CLEAR AND COLORS

ID: 1416

Exposure Guidelines
A: General Product Information

The manufacturer recommends an Occupational Exposure Limit for Polyethylene terephthalate of 10 mg/m³ for total dust and 5 mg/m³ for respirable dust, both as 8-hour TWA's.

B: Component Exposure Limits

Carbon black (1333-86-4)
ACGIH 3.5 mg/m³ TWA
OSHA 3.5 mg/m³ TWA

Titanium dioxide (13463-67-7)
ACGIH 10 mg/m³ TWA
OSHA 15 mg/m³ TWA (total dust)

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Solid, pellets</th>
<th>Appearance:</th>
<th>Clear or various colors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point:</td>
<td>Not applicable</td>
<td>Melting Point:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not applicable</td>
<td>Solubility in Water:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.3-1.4</td>
<td>pH Level:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
<td>Octanol-Water Coefficient:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

*** Section 10 - Chemical Stability & Reactivity Information ***

Stability
Stable under normal conditions of use, storage, and transportation.

Conditions to Avoid
Strong oxidizing agents, heat and ignition sources. Combustible gases can be released when heated above 572°F (300°C).

Hazardous Decomposition
Carbon monoxide, carbon dioxide, partially oxidized organics, acetaldehyde and ethylene.

*** Section 11 - Toxicological Information ***

Health Effects Associated with Individual Ingredients
As supplied, the carbon black (and other colorants) in this packaging material is bound into the polymeric matrix and will not be released through skin contact or under anticipated conditions of use. However, if the material is processed in such a manner (i.e., grinding) that large quantities of fine dusts are generated or the material is burned, a potential for exposure to dust containing carbon black may be created.

Dusts containing Carbon black can cause mechanical irritation of eyes, skin and upper respiratory tract. Chronic overexposure: Can cause chronic bronchitis and lung disease. IARC/NTP: Listed as possibly carcinogenic to humans by IARC (Group 2B)*.

Titanium dioxide Can cause irritation of eyes and respiratory tract. Chronic overexposure: Can cause chronic bronchitis. IARC/NTP: Listed as possibly carcinogenic to humans by IARC (Group 2B)*.

Health Effects Associated with Individual Compounds Formed During Processing
No new/additional compounds are expected to be formed during processing.

Acute Toxicity of Ingredients/Formed Compounds

A: Component Analysis - LD50/LC50
Carbon black (1333-86-4)
Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg
Titanium dioxide (13463-67-7)
Oral LD50 Rat: >10000 mg/kg

B: Formed Compound Toxicity - LD50s/LC50s
This material has no components listed.
Material Safety Data Sheet

Product Name: APET SHEET CLEAR AND COLORS  
ID: 1416

Carcinogenicity of Ingredients
A: Ingredient Carcinogenicity - IARC/NTP

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>IARC 1</th>
<th>IARC 2A</th>
<th>IARC 2B</th>
<th>IARC 3</th>
<th>IARC 4</th>
<th>NTP K</th>
<th>NTP RA</th>
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<tbody>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

B: Ingredient Carcinogenicity - ACGIH
Carbon black (1333-86-4)
ACGIH A4 - Not Classifiable as a Human Carcinogen

Titanium dioxide (13463-67-7)
ACGIH A4 - Not Classifiable as a Human Carcinogen

C: Ingredient References
Carbon black (1333-86-4)
IARC Monograph 93 posted, Monograph 65 [1996]

Titanium dioxide (13463-67-7)
IARC Monograph 93 posted, Monograph 47 [1989]

Carcinogenicity of Compounds Formed During Processing A:
General Product Information
No new/additional compounds are expected to be formed during processing.

Descriptions of IARC and NTP Classifications
IARC 1: The agent is carcinogenic to humans. There is sufficient evidence that a causal relationship existed between exposure to the agent and human cancer.

IARC 2A: The agent is probably carcinogenic to humans. Generally includes agents for which there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

IARC 2B: The agent is possibly carcinogenic to humans. Generally includes agents for which there is limited evidence in humans and less than sufficient evidence in experimental animals.

IARC 3: The agent is not classifiable as to its carcinogenicity to humans. Generally includes agents for which there is inadequate evidence in humans and inadequate or limited evidence in experimental animals.

IARC 4: The agent is probably not carcinogenic to humans. Generally includes agents for which there is evidence suggesting lack of carcinogenicity in humans and in experimental animals.

NTP K: Known to be a human carcinogen.

NTP RA: Reasonably anticipated to be a human carcinogen.

*** Section 12 - Ecological Information ***

Ecotoxicity
A: General Product Information: No information available for product. B:

Component Analysis - Ecotoxicity - Aquatic Toxicity
Carbon black (1333-86-4)
24 Hr EC50 Daphnia magna: >5600 mg/L

Environmental Fate: No information available for product.

*** Section 13 - Disposal Considerations ***

Disposal Instructions: Reuse or recycle material whenever possible. US
EPA Waste Number & Descriptions
A: General Product Information
RCRA Status: Not federally regulated in the U.S. if disposed of "as is." Otherwise, characterize in accordance with applicable regulations (40 CFR 261 or state equivalent in the U.S.)

B: Component Waste Numbers
RCRA waste codes other than described under Section A may apply depending on use of product. Refer to 40 CFR 261 or state equivalent in the U.S.
### Section 14 - Transportation Information

<table>
<thead>
<tr>
<th>PSN #1</th>
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<th>PSN #3</th>
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<td></td>
<td></td>
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<td>UN NA Number:</td>
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</tr>
<tr>
<td>Packing Group:</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>RQ:</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Other - Tech Name:</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other - Marine Pollutant:</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes: (1) When "Not regulated", enter the proper freight classification, "MSDS Number", and "Product Name" on the shipping paperwork.

Canadian Controlled Products Regulation PIN: Not regulated

### Section 15 - Regulatory Information

#### US Federal Regulations

**A: General Product Information**

In reference to Title VI of the Clean Air Act of 1990, this material does not contain nor was it manufactured using ozone-depleting chemicals.

**B: Component Analysis**

None of the components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

#### SARA 311/312 Physical and Health Hazard Categories:

- **Immediate (acute) Health Hazard:** No
- **Delayed (chronic) Health Hazard:** No
- **Fire Hazard:** No
- **Sudden Release of Pressure:** No
- **Reactive:** No

#### State Regulations

**A: General Product Information**

Carbon black (airborne, unbound particles of respirable size) is on the California Prop 65 list. The carbon black in the colorant for this material is bound in a polymeric matrix. As supplied, the carbon black in this material does not meet the criteria of the Prop 65 list.

**B: Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Other Regulations

**A: General Product Information:** No information available for product. **B:**

**Component Analysis - WHMIS IDL**

No components are listed in the WHMIS IDL.

**C: Component Analysis - Inventory**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
<th>AUST.</th>
<th>MITI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene terephthalate</td>
<td>25038-59-9</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Product Name: APET SHEET CLEAR AND COLORS
ID: 1416

*** Section 16 - Other Information ***

MSDS History
Original: March 15, 2008
Revised:

MSDS Status
Original issue by Reynolds Packaging Kama, Inc.

Prepared By
Hazardous Materials Control Committee
Preparer: Dave Brooke: 804-281-2520

Other Information
* Guide to Occupational Exposure Values-2007, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
* Documentation of the Threshold Limit Values and Biological Exposure Indices, Sixth Edition, 1991, Compiled by the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH).
* NFPA 654, Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries.

Key-Legend:
ACGIH American Conference of Governmental Industrial Hygienists
AICS Australian Inventory of Chemical Substances
CAS Chemical Abstract Service
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CFR Code of Federal Regulations
CPR Cardio-pulmonary Resuscitation
DOT Department of Transportation
DSL Domestic Substances List (Canada)
EC Effective Concentration
ED Effective Dose
EINECS European Inventory of Existing Commercial Chemical Substances
EPA Environmental Protection Act
IARC International Agency for Research on Cancer
LC50 Lethal concentration (50 percent kill)
LCLo Lowest published lethal concentration
LD50 Lethal dose (50 percent kill)
LDLo Lowest published lethal dose
LFL Lower Flammable Limit
MITI Ministry of International Trade & Industry
NFPA National Fire Protection Association
NIOSH National Institute for Occupational Safety and Health
NORM Naturally Occurring Radioactive Materials
NTP National Toxicology Program
OEL Occupational Exposure Limit
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
PIN Product Identification Number
PSN Proper Shipping Name
RCRA Resource Conservation and Recovery Act
SARA Superfund Amendments and Reauthorization Act
STEL Short Term Exposure Limit
TCLP Toxic Chemicals Leachate Program
TDG Transportation of Dangerous Goods
TLV Threshold Limit Value
TSCA Toxic Substance Control Act
TWA Time Weighted Average
UFL Upper Flammable Limit
WHMIS Workplace Hazardous Materials Information System
atm atmosphere
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This is the end of MSDS # 1416