Section 1 - Chemical Product and Company Identification

Product: 3234A – Typar Housewrap
Chemical Family: Thermoplastic Polyolefin
Manufacturer Information: Fiberweb, Inc.
70 Old Hickory Blvd.
Old Hickory, TN 37138 USA
Company Contact: Bijan Mansouri
Telephone Number: 1-615-847-7216 (8:00am - 5:00pm CST)
Emergency Phone Contact: Chemtrec (24 Hours)
Emergency Phone Number: 1-800-424-9300

Section 2 - Composition

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>9003-07-0</td>
<td>Polypropylene</td>
<td>&gt;60%</td>
</tr>
<tr>
<td>1317-65-3 in Polyolefin Film</td>
<td>CaCO3 in Polyolefin Film</td>
<td>&lt;40%</td>
</tr>
<tr>
<td>Mixture</td>
<td>UV Stabilizer</td>
<td>&lt;3%</td>
</tr>
<tr>
<td>Mixture Pigment</td>
<td>Masterbatch*</td>
<td>&lt;2%</td>
</tr>
</tbody>
</table>

*Contains Carbon Black (CAS 1333-86-4): <10%; Titanium Dioxide (CAS # 13463-67-7): <1%

Section 3 – Hazards Identification

Emergency Overview
Signs and symptoms of exposure: coughing or wheezing.

Route of Exposure-Skin
Possible mechanical irritation.

Route of Exposure-Eye
Not expected to be a problem being that this product is an inert solid.

Route of Exposure -Ingestion
Not Applicable

Route of Exposure-Inhalation
Not expected to be a problem being that this product is an inert solid.

HMIS Ratings
Health: 0
Fire: 1
Reactivity: 0
Personal Protection: A

Hazard Scale:
0=Minimal
1=Slight
2=Moderate
3=Serious
4=Severe *=Chronic Hazard
Section 4 - First Aid Measures

First Aid-Skin
Wash affected area with soap and water.

First Aid-Eye
Rinse eyes with water for at least 15 minutes. If irritation persists, contact a physician.

First Aid-Ingestion
Minimal toxicity; no adverse effects expected.

First Aid-Inhalation
Not expected to be a problem being that this product is an inert solid.

First Aid-Notes to Physician
No health conditions aggravated by exposure are identified. Contact the poison control center if any problem occurs.

Section 5 - Fire Fighting Measures

Flash Point: Not Applicable
Auto Ignition: 735°F (388°C)
Lower Explosive Limit (%): Not Applicable

Method Used: Not Applicable
Flammability Classification: Not Applicable
Upper Explosive Limit (%): Not Applicable

General Fire Hazards
Solid material may burn upon extended exposure to open flames.

Hazardous Combustion Products
Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons.

Extinguishing Media
Water spray, foam, carbon dioxide, or dry chemical

Fire Fighting Equipment/Instructions
As in any fire, wear a self-contained breathing apparatus and full protective gear.

NFPA Ratings
Health: 0 Fire: 1 Reactivity: 0
Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Section 6 - Accidental Release Measures

Containment Procedures: Sweep waste fabric into a pile.

Clean-Up Procedures: Sweep waste fabric into a waste container and recycle, incinerate or landfill in conformity with local disposal regulations.

Evacuation Procedures: Not Applicable

Special Procedures: None
Section 7 - Handling and Storage

Handling Procedures
Avoid exposure to heat, sparks or open flames.

Storage Procedures
Store material in cool (below 140°F) warehouse that is equipped with a sprinkler system.
Ensure product is not stacked too high.
Store product off the floor to prevent water damage.

Section 8 - Exposure Controls/Personal Protection

Component Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polypropylene</td>
<td>9003-07-0</td>
<td>ACGIH TLV-TWA: None Available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL: None Available</td>
</tr>
<tr>
<td>CaCO3 in Polyolefin Film</td>
<td>1317-65-3</td>
<td>ACGIH: 10 mg/m³, 8 hour TWA total dust in air</td>
</tr>
<tr>
<td>UV Stabilizer in Polyolefin Film</td>
<td></td>
<td>OSHA: None available</td>
</tr>
<tr>
<td></td>
<td>Mixture</td>
<td>ACGIH TLV-TWA: None Available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL: None Available</td>
</tr>
<tr>
<td>Pigment Masterbatch*</td>
<td>Mixture</td>
<td>ACGIH TLV-TWA: 3.5mg/m³ Total/Nuisance Dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL: 3.5mg/m³ Total Dust</td>
</tr>
</tbody>
</table>

*Based on Carbon Black (1333-86-4)

Engineering Controls
Normal room ventilation is usually adequate.

Personal Protective Equipment
Personal Protective Equipment-Eyes/Face
None usually required

Personal Protective Equipment-Skin
None usually required

Personal Protective Equipment-Respiratory
None usually required

Personal Protective Equipment-General
Follow individual plant safety rules.

Section 9 - Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Black Fabric with a Clear</td>
</tr>
<tr>
<td>Polyolefin Film</td>
<td>Solid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NIL</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility (H₂O)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Packing Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>&gt;120oC</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.88-0.99</td>
</tr>
<tr>
<td>Percent Volatiles</td>
<td>NIL</td>
</tr>
</tbody>
</table>

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability
Stable under ordinary conditions of use and storage.

Conditions to Avoid
Combustible when exposed to open flames. Avoid chlorine, fluorine, and other strong oxidizers.

Incompatibility
None Known
Hazardous Decomposition
Carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbon may be emitted upon decomposition.

Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

General Product Information
No components of this product are known to be hazardous according to the criteria specified in 29CFR1910.1200 (Hazard Communication Standard).

Component Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polypropylene</td>
<td>9003-07-0</td>
<td>Rat; LD 50; Route: Intraperitoneal; Dose: &gt;110mg/kg; Toxic Effects: lacrimation; Sence organs and special senses- ptosis; Behavioral- convulsions or effect on seizure threshold; Reference: Yakuri to Chiryo. Pharmacology and Therapeutics 14:1109, 1986</td>
</tr>
<tr>
<td>CaCO3 in Polyolefin Film</td>
<td>1317-65-3 in Polyolefin Film</td>
<td>Oral, rat LD50 = 6450 mg/kg Draize test, rabbit, eye 750 ug/24H Draize test, rabbit, skin 500 ug/24H</td>
</tr>
</tbody>
</table>

Carcinogenicity
General Product Information
Carbon black has been evaluated by IARC as possibly carcinogenic to humans (Group 2B). NIOSH recommends that only carbon black with PAH>.1% be suspected carcinogens. The ACGIH classifies carbon black as A4, Not Classifiable as Human Carcinogen.

Epidemiology
No information available.

Neurotoxicity
No information available.

Mutagenicity
No information available.

Teratogenicity
No information available.

Other Toxicological Information
Specific toxicity testing has not been performed on this product. Hazard evaluation is based on information from similar products, raw material data, and technical literature.
Section 12 - Ecological Information

Ecotoxicity
General product Information
Considered inert to the environment.

Environmental Fate
No available information.

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions
General Product Information
None identified.

Component Waste Numbers
No EPA Waste Numbers are applicable for this product’s components

Disposal Instructions
Dispose of container and unused contents in accordance with federal, state and local requirements.
Processing, use or contamination of this product may change the waste management options.

Section 14 - Transportation Information

Transportation Regulations
Product is not regulated for transportation.

Section 15 - Regulatory Information

US Federal Regulations
General Product Information
No additional information.

Component Analysis-Federal

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>SARA 302 (40CFR355 Appx A)</th>
<th>SARA 313 (40CFR372.65)</th>
<th>CERCLA (40CFR302.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polypropylene</td>
<td>9003-07-0</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CaCO3 in Polyolefin</td>
<td>1317-65-3 in Polyolefin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Film</td>
<td>Film</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>UV Stabilizer</td>
<td>Mixture</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Pigment Masterbatch</td>
<td>Mixture</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Section 16 - Other Information

Other Information
Material for this MSDS was taken from MSDS's for raw materials

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APPROVED BY: MICHAEL THOMASON