


**MATERIAL SAFETY DATA SHEET****QUICK IDENTIFIER (In Plant Common Name)**

Fortress Flashshield Tape

**Manufacturer's Name** RAVEN INDUSTRIES INC.  
**Address** P.O. Box 5107  
 Sioux Falls, SD 57117

**Emergency Telephone Numbers** 800-635-3456  
 605-335-0174  
**Other Information** 1813 "E" Avenue  
 Sioux Falls, SD 57104

**Signature of Person Responsible for Preparation** 

**Date Prepared** April 9, 2008

**Section 1 - IDENTITY**

**Common Name: (Used on Label)** Fortress Flashshield Tape  
**(Trade Name & Synonyms)** FF4100 FF6100  
**Chemical Name** Polymer backing  
 Butyl pressure sensitive adhesive  
**Formula** N/A

**CAS Number(s)** 64742-52-5 14808-60-7  
 265-155-0 1333-86-4  
**Chemical Family** N/A  
 N/A

**Section 2 - HAZARDOUS INGREDIENTS**

Principal Hazardous Component(s) - Chemical and Common Name(s)	%	Threshold Limit Value (units)
Hydrotreated Heavy Naphthalene Distillate	<20%	None Established

**Section 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)**

<b>Boiling Point</b>	Not Applicable (N/A)		<b>Specific Gravity</b>	N/A	<b>Vapor Pressure, mmHg</b>	N/A
<b>Percent Volatile by Volume (%)</b>	N/A	<b>Vapor Density</b>	N/A	<b>Evaporation Rate</b>	N/A	
<b>Solubility in Water</b>	Not known			<b>Reactivity in Water</b>	N/A	
<b>Appearance and Odor</b>	Black plastic tape with release liner Slight					
<b>Flash Point</b>	N/A	<b>Flammability Limits in Air, by Volume (%)</b>	<b>Lower</b> N/A	<b>Upper</b> N/A	<b>Auto Ignition Temperature</b>	N/A
<b>Extinguisher Media</b>	Use water spray, carbon Dioxide, dry chemical or foam					
<b>Special Fire Fighting Proced.</b>	Wear full protective clothing and self contained breathing apparatus					

**Unusual Fire and Explosion Hazards** May release hazardous vapors during a fire

**Section 4 - PHYSICAL HAZARDS**

<b>Stability</b>	Unstable	<b>Conditions to Avoid</b>	
	Stable		X
<b>Incompatibility (Materials to Avoid)</b>	Acids - Bases - oxidizers		
<b>Hazardous Decomposition Products</b>	Oxides of carbon, aromatic and aliphatic carbons, partially oxidized hydrocarbons Toxic gases and smoke, oxides of nitrogen aldehydes, oligomers waxes acrolein		
<b>Hazardous Polymerization</b>	<b>May Occur</b>	<b>Conditions to Avoid</b>	High temperatures
	<b>Will not Occur</b>	X	

**Section 5 - HEALTH HAZARDS****Threshold** N/A**Limit Value****Signs and Symptoms of Exposure**

<b>1. Acute</b>	N/A	<b>2. Chronic</b>	N/A
<b>Overexposure</b>		<b>Overexposure</b>	

**Medical Conditions Generally** There are no known medical conditions aggravated by exposure to this product.**Aggravated by Exposure**

<b>Chemical Listed as Carcinogen</b>	<b>National Toxicology</b>	Not	<b>L.A.R.C.</b>	2B	<b>OSHA</b>	Not
<b>or Potential Carcinogen</b>	<b>Program</b>	Listed	<b>Monographs</b>	1		Listed

<b>OSHA Permissible</b>	None	<b>ACGIH Threshold</b>	None	<b>Other Expos.</b>	None
<b>Exposure Limit</b>		<b>Limit Value</b>		<b>Limit Used</b>	

**Emergency and** N/A**First Aid Procedures****1. Inhalation** Hazardous "inhalable" ingredients are encapsulated in the adhesive and are not expected to be "inhalable"**2. Eyes** Under normal conditions, no special protection is required**3. Skin** If skin irritation occurs as a result of handling, wash affected areas with soap and water and wear protective clothing to avoid future irritation.**4. Ingestion** Under normal conditions, no special protection is required**Section 6 - SPECIAL PROTECTION INFORMATION****Respiratory Protection****(Specify Type)** N/A

<b>Ventilation</b>	<b>Local Exhaust</b>	<b>Mechanical (General)</b>	<b>Special</b>	<b>Other</b>
N/A	N/A	N/A	N/A	N/A

<b>Protective</b>	N/A	<b>Eye</b>	N/A
<b>Gloves</b>		<b>Protection</b>	

**Other Protective** N/A**Clothing or Equipment****Section 7 - SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES****Precautions to be Taken**  
**in Handling and Storage** Store at room temperature**Other**  
**Precautions** None**Steps to be Taken in Case****Material is Released or Spilled** N/A**Waste Disposal****Methods** Normal solid waste disposal methods are recommended**IMPORTANT - Do not leave blank spaces. If information is unavailable, unknown or does not apply, so indicate**