

**MATERIAL SAFETY DATA SHEET**  
For Coatings Resins and Related Materials

<b>MSDS NUMBER</b> MSDS FTR-490	<b>ISSUE DATE</b> 10/30/09	<b>SUPERCEDES:</b> All Previous	<b>PREPARED BY:</b> N/A
------------------------------------	-------------------------------	------------------------------------	----------------------------

**Section I - Product & Company Identification**

<b>PRODUCT IDENTITY (as used on label and list): FTR-490 Adhesive</b>	
<b>Manufacturer / Distributor</b>	<b>EMERGENCY PHONE NUMBER(s)</b>
<b>NAME:</b> Seaman Corporation <b>ADDRESS:</b> 1000 Venture Blvd. <b>ADDRESS:</b> Wooster, OH 44691	<b>DAY:</b> 330-262-1111 <b>NIGHT (CHEMTREC):</b> 800-424-9300 <b>INFORMATION:</b> 330-262-1111
<b>Trade Names or Synonyms:</b> One Way Bonding Adhesive <b>CAS Number:</b> Mixture <b>D.O.T. Hazard Class:</b> Combustible <b>Proper Shipping Name:</b> Combustible Liquid, NOS Packing Group III	<b>HMIS Hazard Codes:</b> none: $\longrightarrow$ extreme 0 $\longrightarrow$ 4 <b>Health:</b> 2 <b>Fire:</b> 2 <b>Reactivity:</b> 0 <b>Personal Protection:</b> B <b>UN #:</b> NA1993

**Section II - Hazardous Ingredients**

Ingredients Material Description	Percent by Weight	C.A.S. Registry Number	Exposure Limits		
			ACGIH/TLV	OSHA/PEL	OSHA STEL
TITANIUM DIOXIDE	1 - 5 %	13463-67-7	N/est	N/est	N/est
TOLUENE	3 - 7 %	108-88-3	50.00 PPM	200.00 PPM	N/est
METHANOL	1 - 5 %	67-56-1	200.00 PPM	200.00 PPM	250.00 PPM

**Section III - Physical Data**

<b>Boiling Range:</b> 147° F	<b>Vapor Density:</b>
<b>Evap. Rate:</b> Faster than n-Butyl Acetate	<b>Liquid Density:</b>
<b>Volatiles:</b> VOL % N/A Wgt. % 45.11	<b>Weight/Volume Measure:</b> 8.97653
<b>Appearance:</b> White	<b>Spec. Gravity:</b> 1.078
<b>EPA method 24 VOC:</b> 152.9 g/L	<b>Photo Chem Reactive Only VOC:</b> 99.1 g/L

**Section IV - Fire and Explosion Hazard Data**

<b>Flammability Class:</b> II	<b>Flash Range:</b> 140° F	<b>Explosive Range:</b> 1.1-12.8%
<b>EXTINGUISHING MEDIA</b>		
Foam, dry chemical, carbon dioxide, water spray or fog.		
<b>SPECIAL FIREFIGHTING PROCEDURES</b>		
Avoid breathing smoke. Use air supplied rescue equipment for enclosed area. Water tends to spread burning liquid if large amounts are used.		
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS</b>		
Flammable. Vapors may ignite explosively and/or cause flash fires. Eliminate sources of ignition. No smoking. Use adequate cross ventilation sufficient to remove odor of solvent and vapors. Electrically ground all containers during transfer.		

**Section V - Toxicological Information**

N/A
-----

## Section VI - Health Hazard Data

**Permissible Exposure Level:** See Section II

### Effects of Overexposure

**Inhalation:** May cause dizziness, nausea, upper respiratory irritation, drowsiness, mental depression or narcosis, difficulty in breathing, irregular heartbeats. Chronic effects of overexposure to solvent vapors could lead to permanent effects to the nervous system, body organs, and slight liver damage on excessive exposure. Use with adequate ventilation. Can cause cardiac arrest and irregular heartbeats when inhaled in massive amounts as for euphoria.

**Eyes:** Irritation

**Skin:** Removal of skin oils, irritation, dermatitis, sensitization.

**Ingestion:** May be harmful if swallowed. Can cause gastrointestinal tract effects.

### First Aid

**Inhalation:** Get fresh air, if necessary, call a physician.

**Skin:** Wash with mild soap and water, apply a mild cream.

**Eyes:** Flush with water for at least 15 minutes.

**Ingestion:** Call poison center immediately.

## Section VII - Reactivity Data

**Stability:**  Unstable     Stable

**Hazardous Polymerization:**  May occur     Will not occur

**Incompatibility:** Strong oxidizing agents. Strong acids and bases.

**Conditions to Avoid:** Fire, sparks, static electricity.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

## Section VIII - Spill or Leak Procedures

### Steps to Be Taken in Case Material is Released or Spilled:

Keep spectators away. Eliminate all ignition sources (flames, hot surfaces) and sources of electrical, (static or friction) sparks. Dike and contain spill with inert materials, transfer liquid and inert absorber to covered metal containers for disposal. Transfer liquids to covered metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams and groundwater with spilled material or used absorbent.

### Waste Disposal Method:

Dispose of in accordance with federal, state and local regulations.

## Section IX - Special Protection Information

**Respiratory Protection:** If workplace exposure limit of product is exceeded, a NIOSH/MSHA approved air supplied respirator must be used in absence of proper environmental control. Engineering or administrative controls should be implemented to reduce exposure.

**Ventilation:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below PEL.

**Protective Gloves:** Chemical resistant gloves.

**Eye Protection:** Chemical splash goggles in compliance with OSHA regulations are advised.

**Other Protective Equipment:** To prevent repeated, prolonged skin contact, wear impervious clothing and boots.

## Section X - Special Precautions

**Precautions to be Taken in Handling and Storage:** Keep container closed when not in use. Store at 60 - 95 degrees F and out of sun. Use adequate ventilation to avoid breathing vapor when cover is removed. Ground all equipment when handling flammable solvent-borne materials.

**Other Precautions:** For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe fumes. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Close all containers when not in use. Empty containers must not be washed and re-used for any purpose. Contact lens wearers take appropriate precaution. Wash hands thoroughly after handling.

For spray application, use only with approved spray equipment.

For flammable products, vapors may cause flash fire or ignite explosively. To prevent buildup of vapors, use adequate ventilation (e.g. open all windows and doors to achieve cross-ventilation). Containers may be hazardous when empty. Never use welding or cutting torch on or near container.

## Section XI - Regulatory Data

### SARA Title III Section 313

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

CAS#	Chemical Name	Percent by Weight
108-88-3	Toluene	3 - 7 %
67-56-1	Methanol	1 - 5 %

### PROP 65 (Teratogen)

**Warning:** This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

CAS#	Chemical Name	Percent by Weight
108-88-3	Toluene	3 - 7 %

## Section XII - Abbreviations Used

N/A= Information or Data Not Available.	OSHA= Occupational Safety and Health Administration
NTP= National Toxicology Program	PEL= Permissible Exposure Limit (8-hr. TWA) (OSHA)
IARC= International Agency for Research on Cancer	TLV= Threshold Limit Value (8-hr. TWA) (ACGIH)
NIOSH= National Institute of Occupational Safety and Health	STEL= Short Term Exposure Limit (15-min TWA) (OSHA)
ACGIH= American Conference of Governmental Industrial Hygienists	C= Ceiling Value

## Disclaimer

This information is furnished without warranty, representation, or license of any kind, except that this information is accurate to the best of Seaman Corporation's knowledge, or is obtained from sources believed by Seaman Corporation to be accurate. No warranty is expressed or implied regarding the accuracy of this information or the results to be obtained from its use thereof. Seaman Corporation assumes no responsibility for injuries proximately caused by use of the material if reasonable safety procedures are not followed as stipulated in this Data Sheet. Additionally, Seaman Corporation assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. Buyer assumes the risk in its use of the material.