



PLEASE READ

## Paint On Screen Application Instructions:



### Materials Required:

Roller (1) 3/8" or less nap roller. (Teflon micro fiber)

Paint Tray.

Painters Tape - 2" or wider roll.

### Materials Recommended:

Any residential or commercial paint sprayer.

Power drill and mixing paddle.

Bubble or Laser Level.

- 1 Gallon Coverage = 170 sq ft / 240" Diagonal.
- 1 Quart Coverage = 45 sq ft / 92" Diagonal.
- Gain = .95 – 4.0+ (depending on selection)
- Very High Viscosity 440+ cSt (can be thinned w/ 15% water)
- Water Soluble (Waterproof Exterior Available)
- Maximum VOC: 50 g/l (0.42 lb/gal)
- Wipe clean with mild soap and water.
- If permanently marked or scuffed, reapply fresh coat of Digital Theater Paint.

**!NOTE! 3DHD Screen Paint Silver must be sprayed! !NOTE!**

Interior Paint On Screens levels 1- 7 can be rolled or sprayed.

**IMPORTANT!: The Paint On Screen projection screen surface will only be as smooth as the surface you paint over.**

### Prep and smooth screen surface thoroughly before applying Paint On Screen

**Repair** damaged areas and fill cracks and nail holes with spackle.

**Scuff** all glossy and non-porous surfaces using medium grit sandpaper (80-120).

**Clean** dirty areas and remove all dust using a clean dry cloth and Rubbing / Denatured Alcohol if needed.

**Sand** smooth any repaired or textured surfaces to a level 5 smoothness.

**Skim** coat surface if necessary.

Porous surfaces such as drywall, gypsum wallboard, and wood based materials such as plywood, particle board, MDF, should be sealed with a flat, white latex primer prior to applying Paint On Screen. Colored surfaces should also be primed with flat, white latex.

## Screen Size Calculations

1. Determine the Height and width of the desired screen size. Viewing distance for a 720p resolution projector should be no less than 1.5 times the screen width while 1080p should be no less than 1.2 times the screen width. See chart for size calculations.

Simply put, a 16:9 projection screen is 1.78 times as wide as it is high.  $16 / 9 = 1.78$  (rounded)

### **If you know your desired projector screen's diagonal size:**

**Projector Screen Height:** To calculate the projector screen height, multiply the diagonal by approximately **0.495**. (In other words the height of the screen is just a bit less than 50% of the diagonal.)

**Projector Screen Width:** The width of the projector screen is approximately 87% of the projector screen's diagonal, so multiply the diagonal measurement by approximately **0.87**.

*Examples:*

#### **Diagonal Size of a home theater projector screen: 100"**

Projector screen height:  $0.495 \times 100" = 49.5$  inches

Projector screen width:  $0.87 \times 100" = 87$  inches

#### **Diagonal Size of a home theater projection screen: 110"**

Projector screen height:  $0.495 \times 110" = 54.5"$

Projector screen width:  $0.87 \times 110" = 95.7"$

### **If you know projection screen width, and need to calculate diagonal size and height of the screen:**

**Projector screen diagonal:** To calculate the projector screen diagonal from the known width, divide the width by 0.87

**Projector screen height:** To calculate the projection screen height, from the known width, multiply the width by 0.57

*Examples:*

#### **Width of a home theater projector screen: 100"**

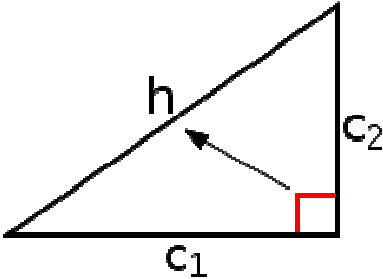
Projector screen diagonal:  $100" / 0.87 = 115"$

Projector screen height:  $100" * 0.57 = 57"$

#### **Width of a home theater projection screen: 80"**

Projector screen diagonal:  $80" / 0.87 = 92"$

Projector screen height:  $80" * 0.57 = 45.6"$



A **hypotenuse** is the longest side of a right triangle, the side opposite the right angle. The length of the hypotenuse of a right triangle can be found using the Pythagorean Theorem, which states that the square of the length of the hypotenuse equals the sum of the squares of the lengths of the other two sides.

For example, if one of the other side's has a length of 3 meters (when squared,  $9 \text{ m}^2$ ) and the other has a length of 4 m (when squared,  $16 \text{ m}^2$ ). Their squares add up to  $25 \text{ m}^2$ . The length of the hypotenuse is the square root of this, or 5 m.

Hypotenuse = Square Root of( A square + B square )

## MSDS

Follow all safety precautions according to the Paint On Screen Material Safety Data Sheet. ( See Below )

### Applying to Screen Surface:

To achieve best results, paint screen in clean and dustless environment.

Be sure to use proper ventilation. Turn HVAC system on and set to 100% fresh air only.



## Fixed dimension screen

2. Once you have determined the height and width of your screen outline it with painters tape. Begin by edging the perimeter. Then continue to fill in the middle of the screen. Follow a vertical up and down path. Your first coat should be light and not drip. If dripping or running occurs wipe off excess paint before applying to wall. Let dry for min 1hr and then apply a second light coat. Be sure to overlap Paint On Screen with the edge of the painters tape border. Let dry for a min of 1hr or until paint does not look wet. Remove tape min 2 hours after applying second coat. After the screen has completely dried and screen surfaced has been checked with your projection system on should you apply the desired border.

## Entire wall Screens.

- 3.** Begin by taping the adjoining walls along the corners. This includes the walls, ceiling and floor. Use painters tape and check to make sure your tape lines are level. With a painters brush, any standard professional brush, heavily coat the border up to the taped edges. This border coat should be thick but not drip. If dripping or running occurs wipe off excess paint before applying to wall. Width of strip should be 3" or more and applied in vertical direction. Let completely dry for 1hr and then apply 2<sup>nd</sup> coat. After the 2<sup>nd</sup> outline coat has dried, take your roller and with just enough paint to cover the roller begin to roll on Paint On Screen moving from left to right with the handle side of the roller always facing right. Roll in a vertical motion only. Be sure to overlap the previously brushed outline as close as you can to the edge of the viewable screen. Continue filling in the rest of the screen. Only roll in a vertical up and down motion with very light pressure. Be sure to equally cover the entire screen. Do not let paint drip or run. Remove excess paint from screen and roller if drips or runs occur. Let dry 2hr. Screen should be completely dry to avoid tactile adhesion between the 1<sup>st</sup> and 2<sup>nd</sup> coat. Apply a second light coat. Use steady, light pressure and roll in a vertical motion being sure to evenly overlap the last pass by 50%. To avoid streaking, reduce pressure while rolling. Thinning Paint On Screen with water up to 10% by volume can help reduce streaking. Remove tape 2 hours after applying second coat.

## Spray for best results ( 3DHD Must be Sprayed! )

- 4.** Spraying Paint On Screen is the fastest, easiest way to apply and provides the best results. Paint On Screen can be sprayed with any residential or commercial paint sprayer. We recommend an inexpensive paint sprayer from your local hardware store. Set to the lowest pressure and lowest flow setting and make a few practice sprays on a test board. The most important application rule is to slowly build Paint On Screen in layers onto the desired surface. This is accomplished by apply several coats (2 – 3) by very lightly misting the intended screen. Applying too thick with too much pressure or too close will create patterns, waves or ripples in the screen surface. If this occurs, let dry, lightly sand and reapply.

The desired spray tip should be considered fine and the flow rate should be the minimum possible while lightly misting the screen. Dry time between layers should be a minimum of 1 hour or until screen is completely dry. At no time should drips or runs occur. Remember, a very light, low pressure mist is all that is needed.

# MSDS

**WARNING!** KEEP OUT OF REACH OF CHILDREN - DO NOT INGEST

**WARNING!** CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.  
HARMFUL IF SWALLOWED.

**WARNING!** This product contains chemicals known to the state of California to cause cancer and births defects or other reproductive harm.

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear an NIOSH-approved respirator to control lead exposure.

Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at **1-800-424-LEAD** or **logon to [www.epa.gov/lead](http://www.epa.gov/lead)**

**WARNING!** CONTAINS ETHYLENE GLYCOL WHICH CAN CAUSE SEVERE KIDNEY DAMAGE WHEN INGESTED AND HAS BEEN SHOWN TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMALS. USE ONLY WITH ADEQUATE VENTILATION! For additional safety information, refer to the **Material Safety Data Sheet ( MSDS )** located at **<http://www.paintonscreen.com>** for this product. If sanding is done, wear a dust mask to avoid breathing of sanding dust. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. Avoid contact with eyes and skin. If you experience eye watering, headaches, or dizziness, leave the area. If properly used, a respirator may offer additional protection. Obtain professional advice before using.

Close container after each use. **FIRST AID:** In case of skin contact, wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin, then wash again with soap and water. Repeated applications may be needed. Remove contaminated clothing. For eye contact, flush immediately with large amounts of water, for at least 15 minutes. Obtain emergency medical treatment. If swallowed, obtain medical treatment immediately. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, seek medical attention.

**National Fire Protection Association - NFPA 704**

**HEALTH 1**

**FLAMMABILITY 1**

**INSTABILITY 1**

\*\*\*\*\*

**Analysis:**

Water  
Ethanediol  
Propenoic Acid  
Butyl Ester  
Polymer with Ethenyl Acetate  
Kaolin  
Keiselguhr  
Propanoic Acid  
Methylmonoester with Trimethyl  
Pentanediol  
Titanium Oxide  
Aluminum with Petroleum Distillates  
% Proprietary Ingredients

Contains **NO** chromium, lead or mercury. Place opened empty containers in normal refuse for disposal. Contact your sanitation department or household hazardous waste coordinator for information concerning re-use, recycling or disposal of unused paint.

.....

Manufacturer Name: Paint On Screen  
U.S. Contact Info.:  
Business Phone: 800.236.8015  
Technical Service Phone: 800.236.8015 ext. 2  
Business Fax: 800.236.8015

-----  
**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**  
-----

Chemical Name	CAS#	Lower Percent	Upper Percent
Acrylic polymer(s)	No data	10	30
Ethylene Glycol	107-21-1	1	5
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	25265-77-4	1	5
Titanium dioxide	13463-67-7	0.1	1
Non-hazardous ingredients		60	100

-----

**SECTION 3: HAZARDS IDENTIFICATION**  
-----

Emergency Overview: Irritant.  
Potential Health Effects:  
Eye Contact: May cause irritation.  
Skin Contact: May cause irritation.  
Inhalation: Prolonged or excessive inhalation may cause respiratory tract irritation.  
Ingestion: May be harmful if swallowed. May cause vomiting.

Chronic Skin Contact: Prolonged or repeated contact may cause skin irritation.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Signs/Symptoms: Overexposure may cause headaches and dizziness.

Aggravation of Pre-Existing Conditions: None generally recognized.

---

#### SECTION 4: FIRST AID MEASURES

---

Eye Contact: Immediately flush eyes with plenty of water for 15 to 20 minutes.

Get medical attention, if irritation or symptoms of overexposure persists.

Skin Contact: Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Other First Aid: Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

---

#### SECTION 5: FIRE FIGHTING MEASURES

---

Flash Point: No Data

Extinguishing Media: Use alcohol foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.

Protective Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

---

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

---

Personal Precautions: Use proper personal protective equipment as listed in section 8.

Spill Cleanup Measures: Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

---

#### SECTION 7: HANDLING AND STORAGE

---

Handling: Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.

Storage: Store in a cool, dry, well ventilated area away from sources of heat,

combustible materials, and incompatible substances. Keep container tightly closed when not in use.

Hygiene Practices: Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

---

## SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Skin Protection Description: Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

Hand Protection Description: Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data.

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

---

## Ingredient Guidelines Guideline Type Guideline Information

Ethylene Glycol

ACGIH TLV-STEL C 100 mg/m<sup>3</sup> (Aerosol only)

Titanium dioxide

OSHA PEL-TWA 15 mg/m<sup>3</sup>

ACGIH TLV-TWA 10 mg/m<sup>3</sup>

To Top of page

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Liquid

Color: White to Silver Grey to Silver

pH: 8.5 to 9.5

Vapor Density: Greater than 1 (Air = 1)

Density: 8 - 10 Lbs./gal.  
Molecular Formula: Mixture  
Molecular Weight: Mixture  
Flash Point: No Data  
VOC: Material VOC: 84gm/l (Includes Water)"  
"Coating VOC: 246 gm/l (Excludes Water)

-----  
SECTION 10: STABILITY AND REACTIVITY  
-----

Chemical Stability: Stable under normal temperatures and pressures.  
Conditions to Avoid: Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.  
Incompatibilities with Other Materials: Oxidizing agents. Strong acids and alkalis.  
Hazardous Polymerization: Not reported.  
Hazardous Decomposition Products: Incomplete combustion may produce carbon monoxide and other toxic gases.

-----  
SECTION 11: MSDS SPEC COVERAGE  
-----

This specification covers all paint on screen products as of 12/1/2008

---

SECTION 12: ECOLOGICAL INFORMATION  
-----

Ecotoxicity: No ecotoxicity data was found for the product.  
Environmental Fate: No environmental information found for this product.

-----  
SECTION 13: DISPOSAL CONSIDERATIONS  
-----

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and

-----  
SECTION 14: TRANSPORT INFORMATION  
-----

DOT UN Number: No Data  
DOT Hazard Class: No Data

-----  
SECTION 15: REGULATORY INFORMATION  
-----

2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate  
TSCA 8(b): Inventory Status: Listed  
Canada DSL: Listed  
Ethylene Glycol

TSCA 8(b): Inventory Status: Listed  
State: Listed in the New Jersey State Right to Know list.  
Listed in the Pennsylvania Hazardous Substances list.  
Canada DSL: Listed

Titanium dioxide

TSCA 8(b): Inventory Status: Listed  
State: Listed in the New Jersey State Right to Know list.  
Listed in the Pennsylvania Hazardous Substances list.  
Canada DSL: Listed

Proposition 65: WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

---

## SECTION 16: ADDITIONAL INFORMATION

---

MSDS Revision Date: 06/26/2008

### Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific materials designated. Refer to individual product safety Data sheets when using more than one product in combination with another.

### References:

1. OSHA Hazard Communication Standard, 1910.1200 and Z Tables.
2. NIOSH Registry of Toxic Effects of Chemical Substances (RTECS) and Pocket Guide to Chemical Hazards.
3. Sax Dangerous Properties of Industrial Materials. Tenth Edition.
4. Hawleys Condensed Chemical Dictionary, Thirteenth Edition
5. IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, WHO International Research on Cancer, 2004.
6. Industrial Hygiene and Toxicology, by F.A. Patty.
7. National Library of Medicine, Department of Health and Human Services, Hazardous Substances Data Bank (HSDB).
8. National Toxicology Program (NTP) Tenth Report on Carcinogens, 2002.
9. Brethericks Reactive Chemical Hazards Database. Version 2.
10. Gassarett and Doulls Toxicology, The Basic Science of Poisons.
11. The Merck Index: An Encyclopedia of Chemicals and Drugs. Merck and Company. Twelfth Edition 1998.
12. Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment and Biological Exposure Indices. TLV Booklet, 2003

If you have any questions please contact customer service at Paint On Screen.

Paint On Screen

<http://www.paintonscreen.com>

800.236.8015  
sales@paintonscreen.com