



# MATERIAL SAFETY DATA SHEET

in accordance with ANSI Z400.1-2004

## SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Id:** 63W2096  
**Product Name:** LINEN ABS DISPERSION

**CAS Number:** Mixture  
**Application:** For industrial use only!  
FOR INDUSTRIAL USE ONLY!

**Supplied By:** Penn Color, Inc.  
400 Old Dublin Pike  
Doylestown, PA 18901

**Telephone:** 215-997-2221  
**Facsimile:** 215-822-5801  
**24 Hour Emergency Telephone:** Chemtrec: 1-800-424-9300  
**E-Mail:** msds@penncolor.com  
**Prepared By:** Regulatory Affairs

## SECTION 2. HAZARDS IDENTIFICATION

**Eye Contact:** May cause irritation.  
**Ingestion:** May be harmful if swallowed.  
**Inhalation:** May be irritating to the respiratory system.  
**Skin Contact:** May cause irritation.

## SECTION 3. INFORMATION ON HAZARDOUS INGREDIENTS

### Hazardous Components:

Component:	CAS #:	Weight %:
Titanium Dioxide	13463-67-7	40 to < 70

## SECTION 4. FIRST AID MEASURES

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
If eye irritation persists, consult a physician.

## SECTION 4. FIRST AID MEASURES

Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Inhalation:	Remove to fresh air. Consult a physician.
Skin Contact:	Wash affected area.
Aggravated Conditions:	No data available.

## SECTION 5. FIRE FIGHTING MEASURES

Flash Point Method:	Not applicable.
Suitable Extinguishing Media:	Use dry chemical, CO2, water spray or "alcohol" foam.
Specific Hazards:	Keep away from heat and sources of ignition.
Special Protective Equipment for Firefighters:	Wear self-contained breathing apparatus and protective suit.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Follow your internal emergency response plan.
Environmental Precautions:	Follow your internal emergency response plan.
Procedure for Cleaning/Absorption:	Follow your internal emergency response plan.

## SECTION 7. HANDLING AND STORAGE

Handling:	Handle in accordance with good industrial hygiene and safety practice.
Storage:	Keep in a dry, cool and well-ventilated place.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Information:

Component:	CAS #:	Weight %:	OSHA PEL:	OSHA STEL:	ACGIH TLV:	ACGIH STEL:
Titanium Dioxide	13463-67-7	40 to < 70	15 mg/m <sup>3</sup> TWA		10 mg/m <sup>3</sup>	

Engineering Controls:	Use only in area provided with appropriate exhaust ventilation.
Respiratory Protection:	In case of insufficient ventilation, wear NIOSH-Approved respiratory equipment.
Gloves Protection:	Wear appropriate protective gloves.
Eyes Protection:	Wear appropriate eye protection.
Skin and Body Protection:	Body protection as necessary to prevent skin contact.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice.

### HMIS Classification:

HEALTH:	1
FLAMMABILITY:	1
REACTIVITY:	0
PERSONAL PROTECTION:	X

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	White Off-white
Physical State:	Solid
pH:	No data available.
Solubility:	No data available.
Solubility in Other Solvents:	No data available.
Partition coefficient (n-octanol/water)	No data available.
Bulk Density (g/cc):	No data available.
Specific Gravity:	Not applicable.
Boiling Point (° C):	Not applicable.
Freezing Point (° C):	Not applicable
Vapor Pressure:	Not applicable.
Vapor Density:	Not applicable.
Evaporation Rate:	Not applicable.
VOC Content (%):	No data available.
Flammability (solid, gas):	No data available.
Flash Point Method:	Not applicable.
Oxidising properties	No data available.
Explosive properties	No data available.

## SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	Will not occur.
Conditions to Avoid:	Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation, freezing temperatures.
Materials to Avoid:	No data available.
Hazardous Decomposition Products:	Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, and other toxic compounds.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Product Information:

This product has not undergone any toxicological studies.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Component Information:

Component:	Dose / Concentration:	Exposure Route:	Test Species:	Target Organs:	GHS Classification:
Titanium Dioxide				respiratory system	

### Other Information:

#### Other:

- This product has not been reviewed for carcinogenicity by IARC, NTP, OSHA or ACGIH. It contains titanium dioxide which is not listed as a carcinogen by NTP, OSHA, or ACGIH. However, in 2006, IARC released Monograph Vol. 93 in which it reclassified titanium dioxide from not classifiable as to its carcinogenicity to humans (Group 3) to possibly carcinogenic to humans (Group 2B). The reclassification was based on two studies in which rats were exposed to extremely high concentrations of titanium dioxide pigment powders in a closed chamber for extended periods of time.

It is important to note that the results of epidemiology studies which evaluated more than 20,000 titanium dioxide industry workers in Europe and the US did NOT suggest a carcinogenic effect from titanium dioxide dust on the human lung or mortality from other chronic diseases including respiratory diseases not associated with titanium dioxide dust. Based upon the results of these studies, the pigment manufacturer(s) conclude that TiO<sub>2</sub> will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace. For additional information, see **Section 15**.

## SECTION 12. ECOLOGICAL INFORMATION

### Product Information:

#### Ecotoxicological Information:

This product has not undergone any ecotoxicological studies.

#### Chemical Fate Information:

This product has not undergone any chemical fate studies.

No ecological data is available for components of this product.

## SECTION 13. DISPOSAL CONSIDERATIONS

#### Waste Disposal:

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

#### EEC Waste Code:

Not determined.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Origin:** Not determined.

## SECTION 14. TRANSPORT INFORMATION

### USDOT:

**Status:** Not regulated.

### ICAO / IATA:

**Status:** Not regulated.

### IMO:

**Status:** Not regulated.

## SECTION 15. REGULATORY INFORMATION

### International Regulatory Rules:

#### Component Information:

Component:	IARC - International Agency for Research on Cancer:
Titanium Dioxide	Monograph 93 [2010] Monograph 47 [1989]

### U.S. Regulatory Rules:

No component of this product is included on an U.S. Regulatory list of interest above its reporting threshold value.

### State Regulatory Rules:

#### Component Information:

Component:	California Proposition 65	Massachusetts Right to Know List:	New Jersey Right to Know List:	Pennsylvania Right to Know List:	Pennsylvania RTK - Special Hazardous Substances:
Titanium Dioxide	See Note 2	Present	1861	Present	

## Canadian Regulatory Rules:

### Component Information:

Component:	WHMIS Hazard Class:
Titanium Dioxide	D2A

### Inventories:

There are many reasons that a chemical preparation may not be compliant with a particular chemical inventory. If the preparation is not compliant with a national chemical inventory shown below or the national chemical inventory of interest is not shown, please contact Regulatory Affairs for information regarding your specific need.

**Canada:** All of the ingredients are listed on or compliant with the DSL Inventory.

**Europe:** All of the ingredients are listed on or compliant with the EINECS Inventory.

**Note:** For additional European Regulatory information, please request an European SDS.

**United States:** All of the ingredients are listed on or compliant with the TSCA Inventory.

## SECTION 16: OTHER INFORMATION

**Origination:** 03-Nov-2009  
**Last Regulatory Review:** 24-Feb-2015  
**Print Date:** 24-Feb-2015

**Revision Number:** N/A  
**Revision:**

**This data sheet contains changes from the previous version in section(s):** None.

## SECTION 16: OTHER INFORMATION

### Important Note:

This information is supplied and offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. **Data provided here are typical and not intended for use as product specifications!**

### Additional Advice:

No data available.

### Environmental Program Definitions:

CSG - The Council of State Governments  
SARA - Superfund Amendments and Reauthorization Act  
TPCH - The Toxics in Packaging Clearinghouse  
WHMIS - Workplace Hazardous Materials Information System

### Inventory Definitions:

DSL - Canadian Domestic Substances List  
NDSL - Canadian Non-Domestic Substances List  
EINECS - European Inventory of Existing Chemical Substances  
ELINCS - European List of Notified Chemical Substances  
TSCA - United States Toxic Substances Control Act

### Occupational Exposure Definitions:

ACGIH - American Conference of Governmental Industrial Hygienists.  
CNS - Central Nervous System  
GI - Gastrointestinal  
NIOSH - National Institute for Occupational Safety and Health - United States  
OEL - Occupational Exposure Limits - France, Germany, Poland, Sweden  
OSHA - Occupational Safety and Health Administration  
PEL - Permissible Exposure Limit - United States  
STEL - Short Term Exposure Limit - United Kingdom and United States  
TLV - Threshold Limit Value - United States  
TWA - Time Weighted Average - United Kingdom and United States

### Toxicity Definitions:

LC50 - A LC50 is a calculated concentration of a substance in an air for a specified length of time, which is expected to cause the death of 50% of an entire defined experimental animal population. It is determined from the exposure to the substance of a significant number from that population.  
LD50 - A LD50 is defined as the calculated dose of a substance in an exposure, other than inhalation for a specified length of time, which is expected to cause the death of 50% of an entire defined experimental animal population. It is determined from the exposure to the substance by any route (other than inhalation) of a significant number from that population.

### Transportation Definitions:

EmS - Emergency Response Procedures for Ships Carrying Dangerous Goods - IMO  
IATA - International Air Transport Association  
ICAO - International Civil Aviation Organization  
IMDG - International Maritime Dangerous Goods  
IMO - International Maritime Organization  
MFAG - Medical First Aid Guide- IMO  
N.O.S. - Not Otherwise Specified  
RQ - Reportable Quantity  
UN - United Nations  
USDOT - United States Department of Transportation

## SECTION 16: OTHER INFORMATION

### Weight and Measurement Definitions:

cc - cubic centimeter  
m<sup>3</sup> - Cubic meters  
°C - Degrees Celsius  
g - Grams  
h - Hour  
Hr - Hour  
kg - Kilograms  
L - Liter  
m - Meter  
μL - Microliters  
mg - Milligram  
mL - milliliters  
mPa.s - Millipascal seconds  
ppb - Parts per billion  
ppm - Parts per million  
% - Percentage  
lb - Pounds  
rpm - revolutions per minute

### Miscellaneous Definitions:

CAS - Chemical Abstract System  
ESIS - European chemical Substances Information System  
NJTS - New Jersey Trade Secret

**End of Safety Data Sheet**