

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE**

degussa.

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	1 / 10

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : 824-0082 COLORTREND® TITANIUM WHITE  
Use of the Substance / : Non-aqueous colorant  
Preparation  
Company : Degussa Corporation  
379 Interpace Parkway  
Parsippany, NJ 07054  
USA

Telephone : 973-541-8000

Telefax : 973-541-8040

US: CHEMTREC EMERGENCY : 800-424-9300  
NUMBER

CANADA: CANUTEC : 613-996-6666  
EMERGENCY NUMBER

Product Regulatory Services : 973-541-8060

**2. HAZARDS IDENTIFICATION****\*\*\* EMERGENCY OVERVIEW \*\*\***

**Form-paste**    **Color-white**    **Odor-Petroleum distillate odor.**

May cause eye, skin and respiratory tract irritation.  
Combustible liquid and vapor.

**POTENTIAL HEALTH EFFECTS****Eye contact**

According to test results on similar colorant base mixtures, this product is classified as a moderate eye irritant. May cause tearing, reddening and/or swelling.

**Skin Contact**

Prolonged or repeated contact may result in defatting and drying of the skin causing skin irritation and dermatitis (rash).  
Moderate irritant according to test results on similar base mixtures.

**Inhalation**

Possibly irritating.  
Excessive inhalation of solvent vapors may cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even death.

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE**

degussa.

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	2 / 10

**Ingestion**

May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

**Chronic Health Hazard**

High concentrations of titanium dioxide dust caused microscopic lung tumors in rats in lifetime inhalation studies. However, DuPont, the primary US manufacturer, based on a review of the test data and based on an epidemiological study of employees, concludes that titanium dioxide pigment will not cause chronic respiratory disease in humans at concentrations experienced in the workplace.

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

---

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Information on ingredients / Hazardous components**

Titanium dioxide				
CAS-No.	13463-67-7	Percent (Wt./ Wt.)	30 - 60 %	
Aluminum hydroxide				
CAS-No.	21645-51-2	Percent (Wt./ Wt.)	5 - 10 %	
Kaolin				
CAS-No.	1332-58-7	Percent (Wt./ Wt.)	5 - 10 %	
Stoddard solvent; Low boiling point naphtha - unspecified				
CAS-No.	8052-41-3	Percent (Wt./ Wt.)	5 - 10 %	
Synthetic Amorphous Silica, Precipitated				
CAS-No.	112926-00-8	Percent (Wt./ Wt.)	5 - 10 %	
Distillates (petroleum), hydrotreated light; Kerosine - unspecified				
CAS-No.	64742-47-8	Percent (Wt./ Wt.)	1 - 5 %	

**Other information**

This material is classified as hazardous under OSHA regulations.

---

**4. FIRST AID MEASURES****Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

**Skin contact**

Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If symptoms develop or persist, obtain medical attention. Wash clothing before reuse.

**Eye contact**

In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

# MATERIAL SAFETY DATA SHEET

## 824-0082 COLORTREND® TITANIUM WHITE

degussa.

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	3 / 10

### Ingestion

Aspiration of material into the lungs may cause chemical pneumonitis (damage to lungs) which may be fatal.

If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

## 5. FIRE-FIGHTING MEASURES

Flash point 38.33 °C , 101 °F  
Method: Pensky-Martens C.C.

OSHA Flammability Classification Combustible Liquid

### Suitable extinguishing media

Use water spray or fog, foam, dry chemical or CO<sub>2</sub>.

### Specific hazards during fire fighting

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

### Further information

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

### Additional advice

Absorb spill with inert material, then place in a chemical waste container. After removal, flush contaminated area with water and collect for disposal. Clean up spills immediately. Remove sources of ignition and ventilate area. Use a respirator and other protective equipment as outlined in Section 8. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

## 7. HANDLING AND STORAGE

### Handling

#### Safe handling advice

Keep away from heat. Keep away from sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling.

### Storage

#### Requirements for storage areas and containers

Keep in a dry, cool place.  
Keep container closed when not in use.

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE****degussa.**

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	4 / 10

Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Component occupational exposure guidelines****• Stoddard solvent; Low boiling point naphtha - unspecified**

CAS-No.	8052-41-3	
Control parameters	100 ppm	Time Weighted Average (TWA):(ACGIH)
	500 ppm	PEL:(OSHA Z1)
	2900 mg/m3	
	100 ppm	Time Weighted Average (TWA)
	525 mg/m3	Permissible Exposure Limit (PEL):(US CA OEL)

**• Kaolin**

CAS-No.	1332-58-7	
	5 mg/m3	PEL:(OSHA Z1)
	Respirable fraction.	
	15 mg/m3	PEL:(OSHA Z1)
	Total dust.	
	2 mg/m3	Time Weighted Average (TWA):(ACGIH)
	Respirable fraction.	
	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
	2 mg/m3	Time Weighted Average (TWA)
		Permissible Exposure Limit (PEL):(US CA OEL)
	Respirable dust.	

**• Titanium dioxide**

CAS-No.	13463-67-7	
	10 mg/m3	Time Weighted Average (TWA):(ACGIH)
	15 mg/m3	PEL:(OSHA Z1)
	Total dust.	
	5 mg/m3 as Ti	Time Weighted Average (TWA)
		Permissible Exposure Limit (PEL):(US CA OEL)
	Respirable fraction.	
	10 mg/m3 as Ti	Time Weighted Average (TWA)
		Permissible Exposure Limit (PEL):(US CA OEL)
	Total dust.	

**• Aluminum hydroxide**

CAS-No.	21645-51-2	
	10 mg/m3	Time Weighted Average (TWA):(ACGIH)

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE****degussa.**

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	5 / 10

Inhalable particulate.

3 mg/m3  
Respirable.

Time Weighted Average (TWA):(ACGIH)

as AI

(ACGIH NIC)

Included in the regulation but with no data values. See regulation for further details

as AI

(ACGIH NIC)

Listed.

**• Synthetic Amorphous Silica, Precipitated**

CAS-No. 112926-00-8

5 mg/m3

PEL:(OSHA Z1)

Respirable fraction.

15 mg/m3

PEL:(OSHA Z1)

Total dust.

20millions of particles  
per cubic foot of air

Time Weighted Average (TWA):(Z3)

0.8 mg/m3

Time Weighted Average (TWA):(Z3)

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

**Engineering measures**

Use explosion-proof ventilation equipment.

**Personal protective equipment****Respiratory protection**

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**Hand protection**

Use impermeable gloves.

**Eye protection**

Chemical resistant goggles must be worn.

**Skin and body protection**

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE**

degussa.

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	6 / 10

Form	paste
Color	white
Odor	Petroleum distillate odor.

**Safety data**

Boiling point/range	> 149 °C
Flash point	38.33 °C Method: Pensky-Martens C.C.
Relative density	1.9
Solubility/qualitative	Solubility in water: Slight.
Viscosity, dynamic	90 - 110 KU (25 °C)
Solvents and Volatiles Data	% VOC (gm/l) 196.72
Evaporation rate	Slower than butyl acetate

**10. STABILITY AND REACTIVITY**

Conditions to avoid	Avoid high temperatures and sources of ignition.
Materials to avoid	oxidizing substances

**11. TOXICOLOGICAL INFORMATION**

Component	Acute oral toxicity	Titanium dioxide 13463-67-7 LD50 Rat: > 24000 mg/kg
		Stoddard solvent; Low boiling point naphtha - unspecified 8052-41-3 LD50 Rat: > 5000 mg/kg
		Synthetic Amorphous Silica, Precipitated 112926-00-8 LD50 Rat: > 31600 mg/kg
		Distillates (petroleum), hydrotreated light; Kerosine - unspecified 64742-47-8 LD50 Rat: > 15000 mg/kg
Component	Acute inhalation toxicity	Titanium dioxide 13463-67-7 LC50 Rat: > 6820 mg/m <sup>3</sup> / 4 h

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE**

degussa.

creating essentials

Material no.		Version	<b>1.17 / US</b>
Specification	<b>139681</b>	Revision date	<b>08/02/2007</b>
Order Number		Print Date	<b>08/03/2007</b>
		Page	<b>7 / 10</b>

Stoddard solvent; Low boiling point naphtha - unspecified  
8052-41-3  
LC50 Rat: > 5500 mg/m3 / 4 h

Distillates (petroleum), hydrotreated light; Kerosine - unspecified  
64742-47-8  
LC50 Rat: > 14100 mg/m3 / 4 h

Component Acute dermal toxicity Titanium dioxide  
13463-67-7  
LD50 Rabbit: > 10000 mg/kg

Stoddard solvent; Low boiling point naphtha - unspecified  
8052-41-3  
LD50 Rabbit: > 3000 mg/kg

Synthetic Amorphous Silica, Precipitated  
112926-00-8  
LD50 Rabbit: > 2000 mg/kg

Distillates (petroleum), hydrotreated light; Kerosine - unspecified  
64742-47-8  
LD50 Rabbit: > 2000 mg/kg

Component Repeated dose toxicity Titanium dioxide  
13463-67-7  
High concentrations of titanium dioxide dust caused microscopic lung tumors in rats in lifetime inhalation studies. However, DuPont, the primary US manufacturer, based on a review of the test data and based on an epidemiological study of employees, concludes that titanium dioxide pigment will not cause chronic respiratory disease in humans at concentrations experienced in the workplace.

Component carcinogenicity assessment Titanium dioxide  
13463-67-7  
Contains a component which is classified as an IARC 2B carcinogen (possibly carcinogenic to humans).

Product General Toxicity Information Chronic inhalation of an ingredient in the controlled product has been shown to cause adverse effects in the lungs.

---

**12. ECOLOGICAL INFORMATION**

General Ecological Information No ecotoxicological studies are available.

---

**13. DISPOSAL CONSIDERATIONS****WASTE DISPOSAL**

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE****degussa.**

creating essentials

Material no.		Version	<b>1.17 / US</b>
Specification	<b>139681</b>	Revision date	<b>08/02/2007</b>
Order Number		Print Date	<b>08/03/2007</b>
		Page	<b>8 / 10</b>

## Advice on disposal

Waste must be disposed of in accordance with federal, state, provincial and local regulations. CONTAINER DISPOSAL: Empty containers by removing the top and inverting to allow all free-flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash. Note: Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal or state authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with mineral spirits until the containers are considered generally product free.

**14. TRANSPORT INFORMATION****Sea transport IMDG-Code**

Class	3
UN-No	1263
Packaging group	III
EmS	F-E, S-E
Proper technical name (Proper shipping name)	
PAINT RELATED MATERIAL	

**Air transport ICAO-TI/IATA-DGR**

Class	3
UN-No	1263
Packaging group	III
Proper technical name (Proper shipping name)	
Paint related material	

**Loading instructions/Remarks**

IATA_C	ERG-Code 3L
IATA_P	ERG-Code 3L
CFR_INWTR	In the U.S. this material may be classified as combustible liquid. Combustible liquids are not regulated in packages 450 liters or less. This applies for shipments by road and rail only.
CFR_RAIL	In the U.S. this material may be classified as combustible liquid. Combustible liquids are not regulated in packages 450 liters or less. This applies for shipments by road and rail only.
CFR_ROAD	In the U.S. this material may be classified as combustible liquid. Combustible liquids are not regulated in packages 450 liters or less. This applies for shipments by road and rail only.

**15. REGULATORY INFORMATION****Information on ingredients / Non-hazardous components**

This product contains the following non-hazardous components



**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE**

degussa.

creating essentials

Material no.		Version	1.17 / US
Specification	139681	Revision date	08/02/2007
Order Number		Print Date	08/03/2007
		Page	9 / 10

NJTSR No.56705700001-5069P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	10 - 30 %
Polyolefin amide alkeneamine			
CAS-No.		Percent (Wt./ Wt.)	1 - 5 %

**US Federal Regulations****OSHA**

If listed below, chemical specific standards apply to the product or components:

- None listed

**Clean Air Act Section (112)**

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- None listed

**CERCLA Reportable Quantities**

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

**SARA Title III Section 311/312 Hazard Categories**

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

**SARA Title III Section 313 Reportable Substances**

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

**Toxic Substances Control Act (TSCA)**

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

**State Regulations****California Proposition 65**

A warning under the California Drinking Water Act is required only if listed below:

- None listed

**MATERIAL SAFETY DATA SHEET****824-0082 COLORTREND® TITANIUM WHITE****degussa.***creating essentials*

Material no.		Version	<b>1.17 / US</b>
Specification	<b>139681</b>	Revision date	<b>08/02/2007</b>
Order Number		Print Date	<b>08/03/2007</b>
		Page	<b>10 / 10</b>

**International Chemical Inventory Status**

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact Degussa Corporation Product Regulatory Department:

- |                          |                           |
|--------------------------|---------------------------|
| • Europe (EINECS/ELINCS) | Listed/registered         |
| • USA (TSCA)             | Listed/registered         |
| • Canada (DSL)           | Listed/registered         |
| • Australia (AICS)       | Listed/registered         |
| • Japan (MITI)           | Not listed/Not registered |
| • Korea (TCCL)           | Listed/registered         |
| • Philippines (PICCS)    | Listed/registered         |
| • China                  | Not listed/Not registered |

---

**16. OTHER INFORMATION****HMIS Ratings**

Health :	2
Flammability :	2
Physical Hazard :	0

**Further information**

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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 material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.