

MATERIAL SAFETY DATA SHEET

IDENTIFICATION

Name Titanium Dioxide Pigments, Ti-Pure®

Grade R-100, R-101, R-900, R-901,
R-902, R-994 and LW

Synonyms

Titania, TiO₂, Rutile, Anatase

CAS Name

Titanium Oxide

I.D. Nos./Codes

NIOSH Access No. XR22750000

Manufacturer/Distributor

E. I. du Pont de Nemours & Co. (Inc.)

Address

Wilmington, DE 19898

Chemical Family

Inorganic Oxide

Formula

TiO₂

CAS Registry No.

13463-67-7

Du Pont Registry No.

Product Information and Emergency Phone

(302) 774-2421

Transportation Emergency Phone

(800) 424-9300

PHYSICAL DATA

Boiling Point, 760 mm Hg

Not Applicable

Specific Gravity

3.8 to 4.2 (Depending on grade)

Vapor Density

Not Volatile

% Volatiles by Vol.

0.5

Form

Solid

pH Information

Appearance

Powder

Melting Point

Vapor Pressure

Not Volatile

Solubility in H₂O

Insoluble

Evaporation Rate (Butyl Acetate = 1)

Not Volatile

Color

White

Odor

None

Octanol/Water Partition Coefficient

HAZARDOUS COMPONENTS

Material(s)

R-901 Amorphous Silica

R-902 Amorphous Silica

R-994 Amorphous Silica

Approximate %

4.0 (Maximum)

2.0 (Maximum)

3.5 (Maximum)

HAZARDOUS REACTIVITY

Instability

Stable

Incompatibility

None known

Decomposition

Will not occur

Polymerization

Will not occur

E- 40316

Date: 5/81

FIRE AND EXPLOSION DATA

Flash Point

Method

Autoignition Temperature

Will not burn

Flammable Limits in Air, % by Vol.

Lower

Will not burn

Upper

Fire and Explosion Hazards

None

Extinguishing Media

Not applicable

Special Fire Fighting Instructions

None

HEALTH HAZARD INFORMATION

Exposure Limits

OSHA Time-Weighted Average (TWA): 15 mg/m³. ACGIH TLV®: 10 mg/m³ (Total Nuisance Dust). 5 mg/m³ (Respirable Nuisance Dust).

Note: Du Pont has elected to observe the ACGIH limits when handling these products.

Significant Routes and Effects of Exposure

According to Du Pont inhalation tests in rats, dust from dried product produce an inert or nuisance dust response in the lungs.

Safety Precautions

Avoid excessive dust.

First Aid

PROTECTION INFORMATION

Ventilation

Good general ventilation should be provided to keep dust concentrations below nuisance dust exposure limits.

Personal Protective Equipment

A chemical cartridge mask with suitable dust filter, such as Mine Safety Appliance #66CM73053 type filter, should be used where nuisance dust limits are exceeded.

Other

DISPOSAL INFORMATION

Aquatic Toxicity

TLm 96: > 1,000 ppm

Spill, Leak or Release

Waste Disposal

Comply with Federal, State and local regulations. If approved, remove to land disposal area.

SHIPPING INFORMATION

Transportation

DOT Hazard Class*:

Not regulated as a hazardous material by DOT.

DOT Shipping Name*:

IMCO Class.:

UN No.:

NA No.:

RQ Quantity*:

*49 CFR 172.101

Shipping Containers

Box, bag, railroad bulk hopper cars.

Storage Conditions

Store in a clean dry area.

ADDITIONAL INFORMATION AND REFERENCES

For further information, see Du Pont Data Sheets:

Ti-Pure® R-100 E-27034
Ti-Pure® R-101 E-27035
Ti-Pure® R-900 E-27037
Ti-Pure® R-901 E-27038
Ti-Pure® R-902 E-27039
Ti-Pure® R-994 E-27044
Ti-Pure® LW E-27049

