



# SAFETY DATA SHEET

Issue Date 09-Jul-2021

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Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Name** Titanium Oxide Paint

### Other means of identification

**Product Code** SAC062

**Synonyms** Titanium dioxide paint, titanium oxide slurry, titanium dioxide slurry

### Recommended use of the chemical and restrictions on use

**Recommended Use** Coating

**Uses advised against**

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

ATI, 1000 Six PPG Place, Pittsburgh, PA  
15222 USA

#### **Emergency telephone number**

**Emergency Telephone** Chemtrec: 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Label elements

#### **Emergency Overview**

**Appearance** White slurry

**Physical state** Slurry

**Odor** Slight nitric

### Hazards not otherwise classified (HNOC)

Not applicable

### Other Information

May cause skin, eye, or respiratory tract irritation. Contains nitric acid, an IARC Group 2A carcinogen, and titanium dioxide, an IARC Group 2B carcinogen.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### **Synonyms**

Titanium dioxide paint, titanium oxide slurry, titanium dioxide slurry.

Chemical Name	CAS No.	Weight-%
Titanium Dioxide	13463-67-7	60 - 70
Water	7732-18-5	30 - 40

Nitric acid	7697-37-2	0.2 - 0.3
Ammonium hydroxide	1336-21-6	< 0.2

#### 4. FIRST AID MEASURES

##### First aid measures

<b>Eye contact</b>	In case of contact with eyes, rinse immediately. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water.
<b>Inhalation</b>	Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	IF SWALLOWED. Call a POISON CENTER or doctor/physician if you feel unwell.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** May cause skin, eye, or respiratory tract irritation.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Non-combustible.

**Unsuitable extinguishing media** Non-combustible.

##### Specific hazards arising from the chemical

Non-combustible.

**Hazardous combustion products** Titanium dioxide an IARC Group 2B carcinogen.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Use personal protective equipment as required.

**For emergency responders** Use personal protective equipment as required.

##### Environmental precautions

**Environmental precautions** Collect spillage to prevent release to the environment.

##### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Collect spillage.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep/store only in original container. Keep from freezing.

**Incompatible materials** Metals that react with acids, such as aluminum, magnesium, zinc.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical Name	ACGIH TLV	OSHA PEL
Titanium Dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust
Water 7732-18-5	-	-
Nitric acid 7697-37-2	STEL: 4 ppm TWA: 2 ppm	TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> (vacated) STEL: 4 ppm (vacated) STEL: 10 mg/m <sup>3</sup>
Ammonium hydroxide 1336-21-6	-	-

### Appropriate engineering controls

**Engineering Controls** Avoid generation of uncontrolled mist.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** If a risk of eye injury or irritation is present, appropriate eye protection is recommended; for example, tight-fitting goggles, foam-lined safety glasses, or other protective equipment that shields the eyes.

**Skin and body protection** Wear protective gloves.

**Respiratory protection** When gases/mists/vapors are generated and if exposure limits are exceeded or irritation is experienced, proper approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Slurry	<b>Odor</b>	Slight nitric
<b>Appearance</b>	White slurry	<b>Odor threshold</b>	-
<b>Color</b>	white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	3 - 4	
<b>Melting point / freezing point</b>	0 °C / 32 °F	
<b>Boiling point / boiling range</b>	100 °C / 212 °F	
<b>Flash point</b>	-	Not applicable
<b>Evaporation rate</b>	-	
<b>Flammability (solid, gas)</b>	-	Not flammable

**Flammability Limit in Air**

Upper flammability limit:	-	
Lower flammability limit:	-	
Vapor pressure	-	
Vapor density	-	
Specific Gravity	1.8	
Water solubility	Aqueous slurry	
Solubility in other solvents	-	
Partition coefficient	-	Not applicable
Autoignition temperature	-	Not applicable
Decomposition temperature	-	
Kinematic viscosity	-	
Dynamic viscosity	-	
Explosive properties	Not applicable	
Oxidizing properties	Not applicable	

**Other Information**

Softening point	-
Molecular weight	-
VOC Content (%)	Not applicable
Density	-
Bulk density	15 lb/gal

<b>10. STABILITY AND REACTIVITY</b>
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**Reactivity**

Not applicable

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
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**Conditions to avoid**

To avoid thermal decomposition, do not overheat.

**Incompatible materials**

Metals that react with acids, such as aluminum, magnesium, zinc.

**Hazardous Decomposition Products**

Titanium dioxide an IARC Group 2B carcinogen.

<b>11. TOXICOLOGICAL INFORMATION</b>
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**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Product not classified.
<b>Eye contact</b>	Product not classified.
<b>Skin Contact</b>	Product not classified.
<b>Ingestion</b>	Product not classified.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
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Titanium Dioxide 13463-67-7	>5,000 mg/kg bw	-	> 6.82 mg/L
Water 7732-18-5	-	-	-
Nitric acid 7697-37-2	-	-	> 2.65 mg/L
Ammonium hydroxide 1336-21-6	-	-	-

### Information on toxicological effects

**Symptoms** May cause skin, eye, or respiratory tract irritation.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Acute toxicity** Product not classified.  
**Skin corrosion/irritation** Product not classified.  
**Serious eye damage/eye irritation** Product not classified.  
**Sensitization** Product not classified.  
**Germ cell mutagenicity** Product not classified.  
**Carcinogenicity** Product not classified.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7		Group 2B		X
Nitric acid 7697-37-2		Group 2A		X

**Reproductive toxicity** Product not classified.  
**STOT - single exposure** Product not classified.  
**STOT - repeated exposure** Product not classified.  
**Target Organ Effects**  
**Aspiration hazard** Product not classified.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

This product as shipped is not classified for aquatic toxicity.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Titanium Dioxide 13463-67-7	The 72 h EC50 of titanium dioxide to <i>Pseudokirchnerella subcapitata</i> was 61 mg of TiO <sub>2</sub> /L.	The 96h LC50s values of titanium dioxide range from greater than 100 mg TiO <sub>2</sub> /L for <i>Oncorhynchus mykiss</i> to greater than 1000 mg TiO <sub>2</sub> /L for <i>Pimephales promelas</i>	The 3 h EC50 of titanium dioxide for activated sludge were greater than 1000 mg/L.	The 48 h LC50 of titanium dioxide to <i>Daphnia magna</i> was greater than 100 mg of TiO <sub>2</sub> /L.
Water 7732-18-5	-	-	-	-
Nitric acid 7697-37-2	The 10 d EC50 of Potassium nitrate to benthic diatoms was greater than 1700 mg/L.	The 96 h LC50 of Nitric acid to <i>Oncorhynchus mykiss</i> was 6000 mg/L.	The 3 h NOEC of Sodium nitrate for activated sludge was greater than 1,000 mg/L.	The 24 h EC50 of Sodium nitrate to <i>Daphnia magna</i> was 8609 mg/L.
Ammonium hydroxide 1336-21-6	The 18d EC50 of Ammonium sulphate to <i>Chiarella vulgaris</i> was 2700 mg/L.	The 96 h LC50 of Ammonium sulphate to <i>Oncorhynchus gorbuscha</i> was 0.068 mg/L of ammonia.	-	The 48-hr LC50 for <i>Daphnia magna</i> exposed to Ammonium chloride was 101 mg/L of ammonia.

### Persistence and degradability

### Bioaccumulation

MobilityOther adverse effects**13. DISPOSAL CONSIDERATIONS**Waste treatment methods

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

DOT Not regulated

**15. REGULATORY INFORMATION**International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Nitric acid - 7697-37-2	7697-37-2	0.2 - 0.3	1.0
Ammonium hydroxide - 1336-21-6	1336-21-6	< 0.2	1.0

SARA 311/312 Hazard Categories

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No

Reactive Hazard

No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Nitric acid 7697-37-2	1000 lb			X
Ammonium hydroxide 1336-21-6	1000 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs
Nitric acid 7697-37-2	1000 lb
Ammonium hydroxide 1336-21-6	1000 lb

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

This product contains the Proposition 65 chemicals listed below. Proposition 65 warning label available at ATImetals.com.

Chemical Name	California Proposition 65
Titanium Dioxide - 13463-67-7	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Titanium Dioxide 13463-67-7	X	X	X
Water 7732-18-5			X
Nitric acid 7697-37-2	X	X	X
Ammonium hydroxide 1336-21-6	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection X

**Prepared By**

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**Revision Note**

Updated to comply with GHS

**Note:**

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.

**End of Safety Data Sheet**

**Additional information available from:**

Safety data sheets and labels available at [ATImetals.com](http://ATImetals.com)