



# SAFETY DATA SHEET

Issue Date 01-Apr-2020

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Version 1

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

### Product identifier

**Product Name** Zirconium Tungstate

### Other means of identification

**Product Code** SAC032

**Synonyms** Zirconium Tungstate; Zirconium Tungsten Oxide, Tungsten Zirconium Oxide (Product #359)

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

**Recommended Use** Chemical intermediate.

**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 material is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation



**Appearance** Powder

**Physical state** Solid

**Odor** Odorless

### **Precautionary Statements - Prevention**

Avoid breathing dust/fume

Wash hands thoroughly after handling  
Use only in well-ventilated areas  
Wear protective gloves/protective clothing/eye protection

**Precautionary Statements - Response**

IF ON SKIN: Wash with plenty of soap and water  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If skin irritation occurs: Get medical advice/attention  
If eye irritation persists: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Precautionary Statements - Storage**

Store in a well-ventilated place  
Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms** Zirconium Tungstate: Zirconium Tungsten Oxide, Tungsten Zirconium Oxide (Product #359).

Chemical Name	CAS No.	Weight-%
Ditungsten Zirconium Octaoxide	16853-74-0	>99

**4. FIRST AID MEASURES****First aid measures**

**Eye contact** Flush with water for 15 minutes. See a physician.  
**Skin Contact** Wash off immediately with soap and plenty of water.  
**Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
**Ingestion** 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, and 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** Not applicable.

**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** Sweep or shovel material into dry containers. Avoid creating uncontrolled dust.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store in a well-ventilated place. Keep container tightly closed.

**Incompatible materials** Halogens.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL
Ditungsten Zirconium Octaoxide 16853-74-0	STEL: 10 mg/m <sup>3</sup> W STEL: 10 mg/m <sup>3</sup> Zr TWA: 5 mg/m <sup>3</sup> W TWA: 5 mg/m <sup>3</sup> Zr	TWA: 5 mg/m <sup>3</sup> Zr (vacated) STEL: 10 mg/m <sup>3</sup> W (vacated) STEL: 10 mg/m <sup>3</sup> Zr

**Appropriate engineering controls**

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

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

**Eye/face protection** When airborne particles may be present, appropriate eye protection is recommended. For example, tight-fitting goggles, foam-lined safety glasses or other protective equipment that

shield the eyes from particles.

**Skin and body protection**

Wear protective gloves.

**Respiratory protection**

When particulates/fumes/gases 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>	Solid	<b>Odor</b>	Odorless
<b>Appearance</b>	Powder	<b>Odor threshold</b>	Not applicable
<b>Color</b>	white, light green		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	-	Not applicable	
Melting point / freezing point	-	Not applicable	
Boiling point / boiling range	-	Not applicable	
Flash point	-	Not applicable	
Evaporation rate	-	Not applicable	
Flammability (solid, gas)	-	Not flammable	
Flammability Limit in Air			
Upper flammability limit:	-		
Lower flammability limit:	-		
Vapor pressure	-	Not applicable	
Vapor density	-	Not applicable	
Specific Gravity	5.10		
Water solubility	Insoluble		
Solubility in other solvents	-		
Partition coefficient	-	Not applicable	
Autoignition temperature	-	Not applicable	
Decomposition temperature	770°C/ 1420°F		
Kinematic viscosity	-	Not applicable	
Dynamic viscosity	-	Not applicable	
Explosive properties	Not applicable		
Oxidizing properties	Not applicable		

### Other Information

Softening point	-
Molecular weight	-
VOC Content (%)	Not applicable
Density	-
Bulk density	156 lb/ft <sup>3</sup>

## 10. STABILITY AND REACTIVITY

### Reactivity

Not applicable

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Dust formation and dust accumulation.

**Incompatible materials**

Halogens.

**Hazardous Decomposition Products**

Not applicable.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	May cause respiratory irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Skin Contact</b>	Causes skin irritation.
<b>Ingestion</b>	Product not classified.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ditungsten Zirconium Octaoxide 16853-74-0	-	-	-

**Information on toxicological effects**

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

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

<b>Acute toxicity</b>	Product not classified.
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Sensitization</b>	Product not classified.
<b>Germ cell mutagenicity</b>	Product not classified.
<b>Carcinogenicity</b>	Product not classified.
<b>Reproductive toxicity</b>	Product not classified.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	Product not classified.
<b>Aspiration hazard</b>	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
Ditungsten Zirconium Octaoxide 16853-74-0	-	-	-	-

Other 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**

<u>DOT</u>	Not regulated
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**15. REGULATORY INFORMATION**International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Not Listed
<b>ENCS</b>	Not Listed
<b>IECSC</b>	Not Listed
<b>KECL</b>	Complies
<b>PICCS</b>	Not Listed
<b>AICS</b>	Not Listed

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 RegulationsSARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

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

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

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

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. OTHER INFORMATION

<u><b>NFPA</b></u>	<b>Health hazards</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> -
<u><b>HMIS</b></u>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X

**Issue Date** 01-Apr-2020

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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.

Safety Data Sheets available at [ATImetals.com](http://ATImetals.com)

**End of Safety Data Sheet**

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