

## XI'AN FUNCTION MATERIAL GROUP CO., LTD Safety Data Sheet Titanium Nitride

## 1. Product and Company Identification

Trade Name: Chemical Formula:	Titanium nitride TiN
Manufacturer/ Supplier: Street: City: State: Zip Code: Country: Tel #:	XI'AN FUNCTION MATERIAL GROUP CO., LTD No. 69, Gazelle Valley, High-Tech Zone XI'AN Shaanxi 710077 China +86-29-88993870/+86-13519132051
	2. Hazards Identification
Signal Word:	None
Hazard Statements:	None
HMIS Health Ratings (0-4): Health: Flammability: Reactivity:	0 (1 for powder) 0 0 (1 for powder)
	3. Composition
Chemical Family: Additional Names:	Ceramic N/A
Titanium nitride (TiN): Percentage: CAS #: EC #:	100 wt% 25583-20-4 247-117-5
	4. First Aid Procedures
General Treatment: Special Treatment: Important Symptoms:	Seek medical attention if symptoms persist. None None
Inhalation: Ingestion:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
Skin: Eyes:	Wash affected area with mild soap and water. Remove any contaminated clothing. Flush eyes with water, blinking often for ten minutes.

	5. Fire and explosion hazards data	
	Non-flammable	
Flash Point:	N/A	
Autoignition Temperature:	N/A	
Extinguishing Media:	Use suitable extinguishing agent for surrounding material and type of fire.	
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.	
	6. Accidental release measures	
If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal	
Environmental Precautions:	Take care not to raise dust. Isolate runoff to prevent environmental pollution.	
	7. Handling and storage	
Handling Conditions:	Wash thoroughly after handling.	
Storage Conditions:	Store in a cool dry place in a tightly sealed container.	
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before	
	eating and smoking. Do not blow dust off clothing or skin with	
Ventilation:	compressed air. Provide sufficient ventilation to maintain concentration at or below TLV.	
8.	Exposure Controls / Personal Protection	
Permissible Exposure Limits:	None	
	None	
Threshold Limit Value:	None	
Threshold Limit Value: Special Equipment:	None	
Special Equipment:		
Special Equipment: Respiratory Protection: Protective Gloves:	None Dust Respirator, NIOSH approved Rubber gloves	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection:	None Dust Respirator, NIOSH approved Rubber gloves	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants.	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9 Color	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants.	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9 Color Form:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants.	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9 Color Form:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants. Physical and Chemical Characteristics Dull Gold Powder, Granules, Pellets, Sputtering target, Custom parts Odorless Insoluble	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9 Color Form: Odor: Water Solubility:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants. Physical and Chemical Characteristics Dull Gold Powder, Granules, Pellets, Sputtering target, Custom parts Odorless	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9 Color Form: Odor: Water Solubility: Boiling Point: Melting Point:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants. Physical and Chemical Characteristics Dull Gold Powder, Granules, Pellets, Sputtering target, Custom parts Odorless Insoluble	
Special Equipment: Respiratory Protection: Protective Gloves: Eye Protection: Body Protection: 9 Color Form: Odor:	None Dust Respirator, NIOSH approved Rubber gloves Safety glasses / goggles Protective work clothing. Wear close-toed shoes and long sleeves/pants. Physical and Chemical Characteristics Dull Gold Powder, Granules, Pellets, Sputtering target, Custom parts Odorless Insoluble N/A	

10. Reactivity	
Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
Incompatible Conditions:	None
Haz. Decomposition Products:	Nitrogen oxide, Metal oxide fume
	11. Toxicological Information
Potential Health Effects:	
Eyes:	May cause irritation
Skin:	May cause irritation
Ingestion:	Low toxicity by ingestion
Inhalation:	May cause irritation
Chronic:	N/Å
Routes of Entry:	None
Target Organs:	N/A
Signs & Symptoms of Exposure:	N/A
Medical Conditions	
Aggravated by Exposure:	N/A
Median Lethal Dose:	N/A
Carcinogen:	Not classified by NTP, IARC
	12. Ecological Information
Ecological data is not available.	
	13. Disposal Considerations
Dispose of in accordance with local, st	tate and federal regulations.
	14. Transportation Data
Hazardous:	Not hazardous for transportation
Hazard Class:	N/A
Packing Group:	N/A
UN Number:	N/A
Proper Shipping Name:	N/A
	15. Regulatory Information
Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	No

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products. Document Last Revised: 11/28/2018