



Toolmex Material Safety Data Sheet TMX® Round Tools TiAlN

According to the regulation (EC) No. 1907/2006

Issued on: 08.2011	Revised on: 04.2014	Revision: 02
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Designation of substance and/or preparation, company name	
Trade name	TMX Round Tools
Use of substance / preparation	Tools for the processing of different materials
Manufacturer / Supplier	TMX by Toolmex
Street / POB	34 Talbot Road
Country code / ZIP code / Town	Northborough, MA 01532
Technical information contact	support@toolmex.com
Phone / Fax / Email	+1-508-653-8897 / +1-508-653-5110 / 844-869-8665 (844-TMX-TOOL) support@toolmex.com
Emergency information	+1-508-653-8897 / 844-869-8665 (844-TMX-TOOL)

MATERIAL SAFETY DATA SHEET

Toolmex® TMX™ specialty coatings represent less than 1% of the total tool by weight. The Ingredients list below includes typical weight ranges for cutting tools to which the coatings are applied. The coating identified below is applied to the tool by Toolmex or its supplier

1 Identification			
Product Name:	Titanium Aluminum Nitride-TiAlN-(monolayer coating)		
Sizes:	As applied to all new and reconditioned cutting tools		
Emergency Telephone Number:	+1-508-653-8897 / 844-869-8665 (844-TMX-TOOL)		
Environmental Health and Safety Information:	+1-508-653-8897 / 844-869-8665 (844-TMX-TOOL)		
Edition Date:	04.2014		
Approved By:	Toolmex Industrial Solutions		
2 Ingredients			
Ingredient Name:	CAS #	%	TLV*
Titanium (in coating)	7439-98-7	0.2-1.0	10 mg/m ³ (I) 3 mg/m ³ (R)
Aluminum (in coating)	7429-90-5	0.02-0.50	5mg/m ³ -Irritant
Other (tooling)		99-99.8	Not Applicable

*Source: ACGIH Threshold Limit Values for Chemical Substances and Physical Agents, 2003



3 Physical Data			
Boiling Point @ 760 mm Hg (°C):		Not Applicable	
Vapor Pressure (mm Hg @ 25°C):		Not Applicable	
Vapor Density (Air = 1):		Not Applicable	
Density (grams/cc):		Not Applicable	
Percent Volatile by Volume (%):		Not Applicable	
Evaporation Rate (Butyl Acetate = 1):		Not Applicable	
Physical State:		Not Applicable	
Solubility in Water (% by Weight):		Not Applicable	
pH:		Not Applicable	
Appearance and Odor:		Black-violet colored coating on tool	
4 Fire and Explosion Hazard Data			
Flash Point:	NA	Lower (LEL):	NA
Flammable Limits in Air (%):	NA	Upper (UEL):	NA
Extinguishing Media:	Titanium Aluminum Nitride coating is not flammable. Fight fire normally based upon other materials involved		
Auto-Ignition:	NA		
Special Fire Fighting Procedures:	As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products from other materials that may be involved		
Special Fire Explosion Hazards:	None		
5 Health Hazard Data			
Threshold Limit Value (TLV) and Source:	Titanium Aluminum Nitride coating forms a wear resistant surface on the tooling to which it is applied. A small amount of coating may be released as particulates during normal machining operations. Airborne concentrations at the TWA are highly unlikely due to low coating amount and small surface area typically involved. (See section 2-Titanium Aluminum)		
Effects of Overexposure:	Irritation		
Emergency First Aid Procedures:	<p>Inhalation: Remove individual from immediate work area to a supply of fresh air. At a minimum, use standard ventilation practices around operating machine tools. Consult physician if condition persists</p> <p>Eye: Wear approved eye protection whenever using machining tools. Use good practices when securing tooling in a machine</p>		

NA = Not Applicable

6 Reactivity Data	
Stable or Unstable:	Stable
Incompatibility (Materials to Avoid):	Not Applicable
Hazardous Decomposition Products:	Not Applicable
Decomposition Temperature (0°F):	Not Applicable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid:	Not Applicable
7 Spill of Leak Procedures	
Procedures to contain and clean up leaks or spills:	TiAlN Coating is applied to metal tooling. Pick up and properly store tooling to avoid trip hazard
Reporting Procedure:	Report all spills in accordance with Federal, State and Local reporting requirements. Toolmex is not aware of any environmental reporting requirements for spilled tooling
Waste Disposal Method:	Used tooling may be re-coated several times before it reaches end of life. Toolmex recommends returning the tooling for recoating as many times as practical and then recycling the metal tool appropriately at end-of-useful-life
8 Protection Information	
Respiratory Protection:	General respiratory protection for dust/fumes
Ventilation: Local Exhaust: Mechanical (General): Special: Other:	General ventilation May control or enclose work area if appropriate Not Applicable Not Applicable
Protective Gloves:	As needed for heat or metal slivers on tooling
Eye Protection:	Use safety eye wear around operating machines
Other Protective Clothing:	Not Applicable
9 Special Precautions	
Handling and Storage:	Store tooling in a dry place. Observe proper lifting techniques for bulk tooling
Transportation / Shipping:	TiAlN coating on tools does not classify the tooling for any hazard class per USDOT regulations. Normally the tooling to which the TiAlN coating is applied is not hazardous materials. Always ship tools per 49 CFR, IATA, ICAO, UN regulation, or other local regulation that may be required for the base tool material

NA = Not Applicable

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Notification is not required because this coating contains aluminum (listed) in an amount below the threshold reporting value. Your individual facility or product reporting requirements may vary	
NOTICE: The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Toolmex Industrial Solutions makes no warranty expressed or implied	
<p>Users Responsibilities</p> <p>This Material Safety Data Sheet provides information consistent with recommended applications of these products and anticipated activities involving the product. It is the user's responsibility to identify and protect against health and safety hazards presented by modification of cemented Carbide powders and products after manufacture. Individuals handling cemented Carbide powders should be informed of all relevant hazards and recommended safety precautions, and should have access to the information contained in this MSDS</p>	
<p>Disclaimer</p> <p>The information contained herein is based upon data provided by manufacturers and suppliers of raw materials used in the manufacture of cemented Carbide powders. The information is offered in good faith as accurate and correct, but no representations, guarantees, or warranties of any kind are made as to its accuracy or completeness, suitability for particular applications, hazards connected with the use of the powder, or the results to be obtained from the use thereof. User assumes all risk and liability of any use or handling of any material beyond Toolmex Industrial Solutions control. Variations in methods, conditions, equipment used to store, handle, or process the material, and hazards connected with the use of the powder are solely the responsibility of the user and remain at its sole discretion.</p> <p>This MSDS is intended to be used solely for the purpose of satisfying informational requests made pursuant to Title 29 of the Code of Federal Regulations, Section 1910.1200 et seq. It is not intended to pre-empt, replace, or expand the terms contained in the Toolmex Industrial Solutions Conditions of Sale. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user, and the user has the responsibility to provide a safe workplace, to examine all aspects of its operation, and to determine if or where precautions, in addition to those described herein, are required. This information may not be valid for these powders when manufactured with alternate materials meeting the special requirements of a particular user</p>	
Company compiling the data sheet:	Department – Toolmex Sales and Marketing Toolmex QA Lab Toolmex Industrial Solutions 34 Talbot Road, Northborough, MA 01532 +1 508 653 8897 / 844-869-8665 (844-TMX-TOOL) support@toolmex.com