



## MATERIAL SAFETY DATA SHEET

**Manufacturer:**

Leitz GmbH & Co. KG  
Leitzstrasse 2  
73447 Oberkochen  
Germany

**USA Distributor:**

Leitz Tooling Systems, Inc.  
4301 E. Paris Ave. SE  
Grand Rapids, MI 49512, USA  
Phone: 616-698-0124

**Chemical name base material:** Marathon coated HSS Knife Stock DMo5 (1.3343)  
**Chemical name base material:** High Speed Steel & PVD Coating  
**Chemical name coating:** CrTiN  
**Chemical family coating:** TiN alloy

**Section II:**

<u>Base Material</u>	<u>Composition Percent</u>
C	0.86 – 0.94
Cr	3.80 – 4.50
Mo	4.70 – 5.20
V	1.70 – 2.00
W	6.00 – 6.70

<u>Coating</u>	<u>Thickness</u>
CrN	1.0 – 1.3 $\mu\text{m}$
CrTiN	0.8 – 1.0 $\mu\text{m}$
TiN	0.3 – 0.5 $\mu\text{m}$

Based on the available information, we herewith certify that the above-mentioned product is in compliance with the appropriate European and Us food contact material regulations and may therefore be used in contact with food in the

EUROPEAN UNION, EFTA

and in the

UNITED STATES OF AMERICA

**Section III:**Physical & Chemical Data

Appearance and Odor: bright yellow (bright gold), no odor  
Boiling Point: N/A  
Vapor Pressure: N/A  
Vapor Density: N/A  
Solubility in Water: N/A  
Percent Volatile by Volume: 0  
Evaporation Rate: N/A



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### Section IV:

#### Special Precautions

Maintain good housekeeping procedures to prevent accumulation of dust (metal and abrasive particles) during grinding. Avoid dust inhalation and direct skin contact with dust.

Clean up using methods which avoid dust generation such as vacuum (with appropriate filter to prevent airborne dust levels which exceed the PEL or TLV), wet dust mop or wet clean up. While grinding, use appropriate NIOSH approved respirator.

Wash hands thoroughly after handling, before eating or smoking. Wash exposed skin at the end of work shift.

Periodic medical examinations are recommended for individuals regularly exposed to grinding mist.

### Section V:

#### Corrosivity and Reactivity Data

Stability:	Stable
Materials to Avoid:	Strong acids
Hazardous Decomposition Products:	None
Conditions to Avoid:	N/A

### Section VI:

#### Health First Aid and Medical Data

While grinding, dust is generated which may be inhaled, even with the use of a dust collection system. This is classified as inert or nuisance dust and would have the pulmonary effects of inert dust. Dust may be inhaled or come in contact with skin or eyes.

<u>Routes of Exposure</u>	<u>Effects of Overexposure</u>	<u>Emergency and First Aid Procedures</u> (Applicable for dusts or mists)
Inhalation	Dust from grinding can cause irritation of nose and throat	If symptoms of pulmonary involvement develop (coughing, wheezing shortness of breath, etc.), remove from exposure and seek medical attention
Skin Contact	Irritation or rash May occur	Wash affected area with soap and water and isolate from exposure. If rash persists, seek medical attention.
Eye Contact	Irritation may occur	Flush with copious amount of water. If irritant persists seek medical attention.
Ingestion		If substantial quantities are swallowed dilute with large amount of water, induce vomiting and seek medical attention.



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Carcinogenic Assessment (NTP Annual Report, IARC Monographs, other); none of the components of this material have been identified as known or suspected carcinogens by NTP, IARC, or OSHA.

### **Section VII:**

#### Spill or Leak Procedure

Clean-up using methods which avoid dust generation such as vacuum, wet dust mop or wet clean up. If airborne dust is generated, use appropriate NIOSH approved respirator.

Dispose of in accordance with appropriate government regulations.

### **Section VIII:**

#### Personal Protection

Respirator Protection: Use an appropriate NIOSH approved respirator if airborne dust concentrations exceed the appropriate PEL or TLV.

Ventilation: Use local ventilation which is adequate to limit personal exposure to respirable airborne dust to levels which do not exceed the PEL or TLV. If such equipment is not available, use respirator as specified above.

Protective Gloves: Use protective gloves or barrier cream, when in contact with dust or mist.

Eye Protection: Safety glasses with side shields or goggles are recommended.

### **Section IX:**

#### Fire and Explosion Data

Flash Point: N/A

Not a fire hazard. Dust generated by mixture of abrasive particles while grinding may ignite if allowed to accumulate in a dry state.