



CRYSTAL CUT TOOL, INC. / D-TEC
10360 Harrison Road, Romulus, Michigan 48174
Michigan Phone: 734-946-0099 / Fax: 734-946-0185
Massachusetts Phone: 781-449-0150 / Fax: 781-449-0680



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: CRYSTAL CUT TOOL, INC.
10360 HARRISON RD.
ROMULUS, MI.
APPROVED
DATE - 15 JULY 1997



PRODUCT NAME: DRESSING TOOLS

CHEMICAL FAMILY: CUTTING PORTION - ABRASIVE
SHANK PORTION - STEEL

SECTION II - HAZARDOUS INGREDIENTS

MATERIAL AND/OR INGREDIENTS:

CUTTING PORTION:
NATURAL DIAMOND - CARBON
SYNTHETIC DIAMOND - POLYCRYSTALLINE DIAMOND (PCD) CARBON, COBALT,
TUNGSTEN CARBIDE

SHANK PORTION: STEEL, TOOL STEEL, ALLOY STEEL, TUNGSTEN
CARBIDE MAY CONTAIN ANY OF THE
FOLLOWING INGREDIENTS: IRON, CARBON,
COBALT CHROMIUM, NICKEL, MANGANESE,
MOLYBDENUM, SILICON, TUNGSTEN, VANADIUM,
SULPHUR, SILVER, COPPER, TIN, LEAD.

SECTION III - PHYSICAL DATA

BOILING POINT ($^{\circ}\text{F}$) N/A
SPECIFIC GRAVITY ($\text{H}_2\text{O}=1$): 7.8 TO 15.5 SINKS
VAPOR PRESSURE (mm Hg): N/A
PERCENT VOLATILE BY VOLUME: N/A
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: INSOLUBLE
MELTING POINT: 480 $^{\circ}\text{F}$ (SOLDERS) TO 2900 $^{\circ}\text{F}$ (INGREDIENTS)
APPEARANCE AND ODOR: SOLID METALLIC SHAPED, GREY TO BRIGHT COLOR, ODORLESS

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT: N/A
FLAMMABLE EXPLOSIVE LIMITS: N/A
UNUSUAL FIRE EXPLOSION HAZARDS: N/A
SPECIAL FIRE FIGHTING PROCEDURES: N/A

SECTION V - HEALTH HAZARD INFORMATION

DRESSING TOOLS: This product contains diamond, either natural or synthetic and may be attached or encapsulated to a metallic shank by brazing, soldering or by using a metallic matrix.

In normal use, the degradation of a dressing type tool is so gradual, and the developed dust quantities of the tool so minute so as not to present any significant health hazard other than those expected when grinding any material. Recommended precautions are, the use of safety glasses and shields, well positioned dust collection intakes and good local ventilation. Dusts containing nickel, chromium and lead, are considered carcinogens when inhaled. Dusts containing cobalt are suspected to have the potential for causing respiratory disease when inhaled. CRYSTAL CUT TOOL has no knowledge of any chemical hazard that has developed from the use of these tools. The metal working and machining industries are so diverse as to make it impossible to control applications for these tools. Many applications are captive and/or involve trade secrets, or are classified. Although CRYSTAL CUT TOOL has attempted to present accurate and current information regarding the use of these tools, CRYSTAL CUT TOOL assumes no liability for any loss, damage, or injury of any kind which may result from or arise out of the use of the data here presented.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE
INCOMPATIBILITY: ACIDS
DECOMPOSITION PRODUCTS: METAL OXIDES
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: N/A
WASTE DISPOSAL METHODS: RESUE, SELL AS SCRAP, OR DISPOSE IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

SECTION VIII - PERSONAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT: SAFETY GLASSES WITH SIDE SHIELDS OR GOGGLES SHOULD BE WORN AT ALL TIMES WHEN MACHINING OR GRINDING. IF DUSTS ARE DEVELOPED DURING MACHINING AND/OR GRINDING OPERATIONS. ADEQUATE VENTILATION AND DUST COLLECTION SHOULD BE PROVIDED TO LIMIT PERSONAL EXPOSURE OF AIRBORNE DUST TO LEVELS WHICH DO NOT EXCEED THE PEL OR TLV FOR THE MATERIALS INVOLVED. IF SUCH EQUIPMENT IS NOT AVAILABLE, APPROVED PERSONAL RESPIRATORS SHOULD BE USED.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: N/A
OTHER PRECAUTIONS: N/A
(REFER TO APPLICABLE OSHA SAFETY REGULATIONS)