



REGAL CUTTING TOOLS INC.

Regal Cutting Tools : National Twist Drill : New York Twist Drill

SAFETY DATA SHEET ( SDS )

SECTION 1--- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Table with 2 columns: Field Name (PRODUCT NAME, Product Use, Chemical Name, Manufacturer) and Description (High Speed Steel and Cemented Tungsten Carbide Cutting Tools, Metalworking Tools, High Speed Steel, Tungsten Carbide with Cobalt/Nickel Binder, and Brazed Carbide products : Ferrous Alloys, Cobalt, Regal Cutting Tools, Inc. 5330 East Rockton Rd. Roscoe, IL 61073 - Phone 815/389-3461, Regal Cutting Tools, Inc. 3950 Lake Drive, Loris, SC 29569 -Phone 843/756-0466)

EMERGENCY TELEPHONE NUMBER 815-389-6008

SECTION 2-HAZARDS IDENTIFICATION

Overview: As supplied, this product does not present a physical or health hazard. Processing of the product for some final uses can include formation of dust particles or fumes which may present certain health hazards. Dusts from this product may pose a dust explosion hazard. No health effects have been reported for exposure to this material in solid form.

Table with 3 columns: Hazard Label Elements (GHS Label Elements, Hazard Pictograms, Signal Word, Hazard Statement, Precautionary Statement), Classification system (NFPA rating, Health, Fire, Reactivity), and HMIS -rating (Health, Fire, Reactivity)

Potential Health Effects:

Inhalation - Can cause respiratory irritation by prolonged cutting or grinding without ventilation. Repeated exposure may lead to respiratory sensitization producing asthma-like conditions.

Skin -Mist dust may irritate the skin. Rubbing may increase mechanical irritation to the skin. No components of this product are known to be absorbed through the skin.

Eyes - Dust or powder through coolant mist, when cutting may be irritating to the eye. Rubbing may cause abrasion of the cornea, and may cause irritation with redness, pain and itching.

Ingestion - irritant in the form of metallurgical powder, dust, or mist from grinding, may cause irritation of the throat, stomach and gastrointestinal tract.

SECTION 3-COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients

Table with 8 columns: Component Elements, CAS NO., PEL (mg/m3), TLV (mg/m3), Component Elements (continued), CAS NO., PEL (mg/m3), TLV (mg/m3). Lists elements like Carbon, Chromium, Cobalt, Copper, Iron, Manganese, Molybdenum, Nickel, Silicon, Tantalum, Titanium, Tungsten, Vanadium.

\* Identifies substances that are subject to the requirements of section 313 of Title III Superfund Amendments and Reauthorization Act of 1986 and 40CFR part 372.

SECTION 4 -FIRST AID MEASURES

Inhalation-Supply fresh air, consult doctor in case of complaints. If breathing has stopped, perform artificial respiration. Get medical attention immediately.

Skin contact - Generally this product does not irritate the skin, if irritation or rash occurs, wash affected area with soap or mild detergent and large amounts of water. Seek medical attention.

Eye Contact - Rinse opened eye for several minutes under running water. Get medical attention immediately.

Ingestion - If this material is swallowed, give large amounts of water. Get medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Fire and Explosion hazards-Under rare conditions, finely divided powder or dust from grinding mist is expected to be a fire and explosion hazard when exposed to high temperatures or ignition sources. This product, except as powder or dust, is not a fire hazard.

Flash point : Not applicable

Extinguishing media: Tools and coatings are not flammable. Fire normally based upon other materials involved.

Special Fire Fighting Procedures: Fire fighting personal must use proper respiratory protection and fire fighting equipment. Use powdered sodium chloride, or suitable dry powder. Avoid breathing fumes from burning material.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Not required

Procedures to contain and clean up leaks or spills: Coating is applied to metal tooling and will not be released. If tooling is spilled, pick up and properly store tooling to avoid trip hazard.

Reporting Procedure : report all spills in accordance with Federal, State, and local reporting requirements.

## SECTION 7 - HANDLING AND STORAGE

Handling and Storage : Store tooling in a dry and humidity controlled area. Always observe proper lifting techniques for heavy tooling. Minimize dispersion of dust in the air.

## SECTION 8 - EXPOSURE CONTROL /PERSONAL PROTECTION

Respiratory Protection: General respiratory protection for dust/fumes

Ventilation: Provide local exhaust ventilation to maintain exposure levels when grinding with cutting tools

Protective Gloves: Use as needed for heat or metal slivers on tooling

Eye Protection : Always use safety eye wear when using cutting tools and running machines.

Foot Wear : It is always recommended to wear safety shoes with steel toes and slip resistance soles when using cutting tools.

Protective Clothing : N/A

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Form: Solid Color: Silver Gray

Odor : odorless

Solubility in water : Practically insoluble

Boiling Point: N/A

Melting Point : N/A

## Section 10 -STABILITY AND REACTIVITY

Stability : Stable under temperatures and pressure, material will begin softening at approximately 2600 degrees F (1425 degrees C ) will proceed

to a liquid and will form irritating and toxic oxides at extremely high temperatures.

Incompatibility ( materials to avoid ) : Exposures to strong mineral acids

Hazardous Decomposition Products : N/A

Decomposition Temperature: N/A

Hazardous Polymerization : Will not occur

Conditions to avoid : Avoid exposures to generated dust and/or fumes.

## SECTION 11 -TOXICOLOGICAL INFORMATION

Threshold limit value (tlv and source) : Regal Cutting Tools, New York Twist Drill, and National Twist Drill tools are a Cobalt-molybdenum-vanadium tool which is machined and heat treated. An extremely small amount of particulate containing cobalt, molybdenum or vanadium from the contact surface may be released during intermittent tool use. The low amount released and the small wear surface make short term exposure at the TLV highly unlikely. Avoid prolonged exposure if good ventilation is not present. Cobalt fumes or dust may cause pulmonary, skin, or eye irritation. Cobalt may be a sensitizing agent for skin and respiratory system. Chronic exposure may affect the heart, pancreas, thyroid gland, or bone marrow. Nickel is an eye, skin and mucous membrane irritant and a pulmonary and skin sensitizer. Copper is a skin, eye, and mucous membrane irritant and skin sensitizer. Individuals with chronic respiratory or skin disorders may be at risk from exposure.

## SECTION 12 - ECOLOGICAL INFORMATION

Used tooling, at the end of the tool life, is recommended to be recycled. Solids and dust should also be recycled, instead of sending it to a landfill. No potential ecological hazards are known.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method : The material in this product should be sent to an appropriate reclamation facility if available. If material cannot be sent to a reclamation facility, disposal should be made in compliance with federal, provincial/state, and local environmental regulations. Must not be disposed of together in household or industrial trash.

## SECTION 14 - TRANSPORTATION INFORMATION

TRANSPORTATION -SHIPPING : This product does not classify the tooling for any hazard class per USDOT regulations.

To our knowledge, the tools are not a hazard material. Always ship tools in accordance with guidelines and regulations established by the Department of Transportation, or other local regulations that may be required for the base tool material.

## SECTION 15 - REGULATORY INFORMATION

Notification is not required because the cobalt, vanadium and molybdenum content of the coating are below the threshold reporting value. Reporting requirements may vary based upon your other facility requirements. Some ingredients in cemented tungsten carbide products, including tungsten, Cobalt, nickel, copper, chromium and chromium Compounds are subject to the requirements of Section 313 of the Title III of Superfund Amendments and Reauthorization Act of 1986 and CFR part 372.

WHMIS Classification : Class D Subdivision B. Division 2. This is a manufactured product and is not a " controlled product " under WHMIS

## Section 16 -Other Information

Regal Cutting Tools, National Twist Drill and New York Twist Drill do not manufacture any of the steel used to manufacture its products.

The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. However, this shall not constitute a guarantee for any specific product features, and shall not establish a legally contractual relationship.

Prepared by W. Weideman on March 19, 2015