

MATERIAL SAFETY DATA SHEET • MSDS



SECTION 1 • PRODUCT IDENTIFICATION

TRADE NAME	CUBIC BORON NITRIDE WHEEL
ANAMET PRODUCT NUMBER	144-X
CHEMICAL NAME	

MANUFACTURER / SUPPLIER'S NAME ANAMET
ADDRESS P.O. Box 538
 BOUCHERVILLE, QUÉBEC, J4B 6Y2
TELEPHONE NO. (450) 646-1290
EMERGENCY TELEPHONE NO. CANUTEC (613) 996-6666

SECTION II • COMPOSITION / INFORMATION ON COMPONENTS

Chemical characterization Description	CAS number	% max	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Silver	7440-22-4	85	0.01	0.1
Cobalt	7440-48-4	60	0.05	0.05
Copper	7440-50-8	85	1.0	1.0
Tin	7440-31-5	25	2.0	2.0
Graphite	7782-42-5	20	15MPPCF	2.0
Silicon Carbide	409-21-2	73	10	10
Alpha-Alumina	1344-28-1	10	10	10
Nickel	7440-02-0	82	1.0	1.0
Phosphorous	7723-14-0	1	0.1	0.1
Manganese	7439-96-5	3	5.0	5.0
Molybdenum	7439-98-7	1	15	10
Silicon Powder	7440-21-3	5	Not Available	10
Silicon Dioxide	14808-60-7	<1	0.1	0.1
Tungsten Carbide	12070-12-1	5	5	5
Aluminum	7429-90-5	90	15	10
Cubic Boron Nitride	10043-11-5	5	10	10
Cured Phenol Formaldehyde Resin	9003-35-4	5	5	1
Diamond	7782-40-3	5	0.1	0.3
Iron	7439-89-6	80	Not available	
Amorphous Silica, Fused	60676-86-0	5	Not available	

* Materials are regulated by OSHA 29 CFR 1910.1200. Hazard Communication Standard,

MATERIAL SAFETY DATA SHEET • MSDS



AND/OR THE Massachusetts General Law Chapter 111F, Right To Know Regulations. Silicon Dioxide is listed by NTP as a carcinogen. Other studies are not in agreement with IRAC that nickel is a probable human carcinogen.

Tests with products known to contain Crystalline Silica did not produce any detectable amount of Respirable free Crystalline Silica. The product may be comprised of only some of the above. Some substances are regulated under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Canadian National Pollution Initiative (NPRI).

SECTION III • PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling point in °C	Not applicable.	Vapor pressure (mm Hg)	Not applicable.
% Volatile by volume	Not applicable.	Vapor density (Air = 1)	Not applicable.
Density (Water = 1)	Not applicable	Evaporation rate (Butyl acetate= 1)	Not applicable.
Solubility in water	Insoluble.		
Appearance and odor	Solid product. May give off an odor when in use.		

SECTION IV • FIRE / EXPLOSION HAZARD

Flash point	Not available.			
Flammable limits	LEL	Not applicable.	UEL	Not applicable.
Extinguishing media	Use water.			
Special fire fighting procedures	None.			
Explosion potential	Not available.			

SECTION V • REACTIVITY

Stability	Stable.
Incompatibility	Not applicable
Hazardous decomposition products	When in use and decomposing odors are generated. In most cases, the material removed from the work piece will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.
Hazardous Polymerization	Will not occur.

MATERIAL SAFETY DATA SHEET • MSDS



SECTION VI • TOXICOLOGICAL PROPERTIES OF PRODUCT

A - SUGGESTED FIRST AID

Eyes	Wash with large amounts of water. Obtain first aid and/or medical assistance if needed.
Skin	Wash affected areas with soap and water. Obtain medical assistance.
Inhalation	Remove to fresh air. Artificial respiration as needed. Obtain medical assistance.
Ingestion	Obtain medical assistance.

B – TOXICOLOGICAL INFORMATION

PRIMARY ENTRY ROUTES: Skin contact, inhalation and eye contact.

• SHORT TERM EXPOSURE

Eyes	Dust may irritate eyes.
Skin	Some may experience skin irritation from dust.
Inhalation	Acute: coughing, shortness of breath. Chronic: May affect breathing capacity.
Ingestion	Not known to have adverse effects, but ingestion is not recommended.
Other potential health risks	Grinding may create elevated sound levels which may affect hearing and may aggravate pre-existing respiratory conditions.

• LONG TERM EXPOSURE

Carcinogenicity	None.
Teratogenicity, Mutagenicity and other reproductive effects	None.
Skin Sensitization	None.
Respiratory tract sensitization	None.
Synergistic materials	None.

SECTION VII • PRECAUTIONARY INFORMATION

PERSONAL PROTECTIVE MEASURES

Eye protection	Wear safety glasses. See OSHA 29 CFR 1910.33
Respiratory protection	Respirators are required when airborne contaminant levels exceed the TLV.
Ventilation	Use adequate ventilation. See OSHA 29 CFR 1910.94 & 29 CFR 1910.1000
Other precautions	See OSHA 29 CFR 1910.25.
HMIS Hazard Ratings	Health: 1 Flammability: 0 Reactivity: 0

MATERIAL SAFETY DATA SHEET • MSDS



SECTION VIII • SAFETY PRECAUTIONS IN CASE OF LEAKS OR SPILLS

Spill or leak procedure	Clean up in standard manner.
Waste disposal	Follow standard landfill methods consistent with federal, provincial and municipal laws.

SECTION IX • STORAGE AND HANDLING

Storage	Store in cool, well ventilated dry area.
Handling	<ul style="list-style-type: none"> • Always handle and store wheels in a careful manner. • Always visually inspect all wheels before mounting. • Always check machine speed against the established maximum safe operating speed marked on the wheel. • Always check mounting flanges for equal and correct diameter. • Always use mounting blotters on wheels for dry cutting. • Always be sure work rest is properly adjusted. • Always use a safety guard covering at least one half of the grinding wheel. • Always allow newly mounted wheels to run at operating speed, with guard in place, for at least one minute before grinding. • Always turn off coolant before stopping wheel to avoid creating an out-of-balance wheel.
Shipping classification	<ul style="list-style-type: none"> • Dot Shipping Name: Not regulated. • TDG/UN Shipping Names: Not regulated. • UN Number: Not regulated. • Hazard Class: Not regulated. • Packing Group: Not regulated. • TDG Exemption: Not regulated. • Label: Not regulated. • ATA Class: Not regulated. • IMDG Class: Not regulated.
DOT hazard class	
HMIS Coding	Health: 1 Flammability: 0 Reactivity: 0

SECTION X • ECOLOGICAL INFORMATION

Environmental Fate and Distribution	Not available.
Persistence and Degradation	Not available.
Toxicity	Not available.
Effect of effluent treatment	Not available.



SECTION XI • REGULATORY INFORMATION

• EC REGULATIONS:

TSCA STATUS: On Toxic Substance Control Inventory.
 CERCLA REPORTABLE QUANTITY: None.
 SARA TITLE III

- Section 302: None.
- Section 311/312: None.
- Section 313: None.

RCRA STATUS: Not regulated.

• CANADIAN REGULATIONS:

WHMIS Classification: Not regulated.

Anamet Inc. declines all warranties of description, merchantability or fitness for a particular purpose or any other warranties expressed or implied. All information contained in this data sheet result from figures supplied by the merchant and/or other recognized technical sources. Although this information is presumed to be complete and exact, Anamet Inc. does not guaranty any of the claims expressed or implied. Since the use of this product is not supervised by Anamet Inc., users are therefore responsible to verify if the product is designed for their particular application. They must also assume all risks associated with its use, manipulation and the elimination of the product as well as those arising from the publication, utilization or exactitude of the information contained in the present data sheet. This information pertains only of the product referred to in this specific data sheet and does not apply to its use in combination with other products or in any other process. In not event Anamet Inc. will be liable for incidental or consequential damages resulting from the use or misuse of this product.



TERMINOLOGY

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

CFR: Code of Federal Regulations (Transportation in U.S.A.)

DOT: Department of Transportation (USA)

DSL: Domestic Substance List

IARC: International Agency for Research and Cancer

LC: Lethal Concentration

LD: Lethal Dosage

MSHA: Mine Safety and Health Administration (USA)

NIOSH: National Institute for Occupational Safety and Health (USA)

NTP: National Toxicology Program (U.S.A.)

OSHA: Occupational Safety and Health Administration (USA)

PEL: Permissible exposure limit.

STEL: Short term exposure limit.

TDG: Transportation of Dangerous Goods

TLV: Threshold limits value.

TSCA: Toxic Substances Control Act

TWA: Time-weighted average

USEPA: United States Environmental Protection Agency

WHMIS: Workplace Hazardous Materials Information System