

Date: 1/02/07

Dear Valued Customer:

In compliance with Federal Hazard Communication Standard 29 CFR1910.1200 and Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA), we enclosed revised Material Safety Data Sheets (MSDS) for Bonded Superabrasive products. The basic categories include:

BONDED DIAMOND or CUBIC BORON NITRIDE GRINDING WHEELS

Suppliers of materials listed in Section 313 must notify customers and distributors of these materials and the mixtures containing them.

The MSDS sheets contain complete generic information as required by the Federal Regulations. This does not mean all materials listed are present in all Bonded Superabrasive products.

The MSDS sheets attached should be forwarded to the individual responsible for plant safety. **DO NOT DETACH** this cover letter from your MSDS packet.

Sincerely,

Jonathan Szucs
Engineering Manager
Advanced Superabrasives Inc.

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME

Diamond or Cubic Boron Nitride Grinding Wheels.

MANUFACTURER

Advanced Superabrasives Inc..
P.O. BOX 1390
1270 North Main St.
Mars Hill, NC 28754
Tell. # 828-689-3200

Revision Date

01/02/07

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>SUBSTANCE DESCRIPTION</u> | <u>MAX. %</u> | <u>CAS #</u> |
|---------------------------------|---------------|--------------|
| Copper(*) | 85.0 | 7440-50-8 |
| Graphite Powder | 10.0 | 7782-42-5 |
| Silver(*) | 55.0 | 7440-22-4 |
| Silicone Carbide | 73.0 | 409-21-2 |
| Aluminum Oxide | 75.0 | 1344-28-1 |
| Nickel(*) | 60.0 | 7440-02-0 |
| Molybdenum | 3.0 | 7439-98-7 |
| Cured Phenol Formaldehyde Resin | 48.0 | 9003-35-4 |
| Calcium Oxide | 6.0 | 1305-78-8 |

OTHER

(*) This substance is regulated under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Canadian National Pollution Reduction Initiative (NPRI). The grinding wheel may be comprised of only some of the above.

SECTION 3. HAZARDS IDENTIFICATION

INHALATION ACUTE EXPOSURE EFFECTS

Dust may be slightly irritating to eyes and respiratory tract at high concentrations.

EYE CONTACT ACUTE EXPOSURE EFFECTS

Dust may irritate eyes.

SKIN CONTACT ACUTE EXPOSURE EFFECTS

Some may experience skin irritation from dust.

INGESTION ACUTE EXPOSURE EFFECTS

No known adverse effects, but ingestion not recommended.

SECTION 4. FIRST AID MEASURES

INHALATION

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

SKIN CONTACT

Wash affected areas with soap and water. Obtain medical assistance.

EYE CONTACT

Wash with large amounts of water. Obtain first aid and medical assistance, if needed.

INGESTION

Obtain medical assistance.

SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING PROCEDURES

N/A

HAZARDOUS PRODUCTS/COMBUSTION

None.

SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN UP

Follow normal clean up procedures.

SECTION 7. HANDLING AND STORAGE

HANDLING

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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION PROTECTION

Handle with adequate ventilation. See OSHA 29 CFR 1910.1000 (Air contaminants).

RESPIRATORY PROTECTION

Respirators are required when airborne contaminants level exceeds the TLV(s).

EYE PROTECTION

Always WEAR SAFETY GLASSES or some type of eye protection when grinding.

OTHER PROTECTION

Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29CFR 1910.134 and other applicable regulations.)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR

Solid article. Odorless.

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBLE

N/A

DECOMPOSITION

In use, dusts are generated. In most cases, the airborne material removed from the work piece will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.

SECTION 11. TOXICOLOGICAL INFORMATION

INHALATION CHRONIC EXPOSURE EFFECTS

Chronic: May affect breathing capacity.

CARCINOGENICITY

Nickel – EPA-A, IARC-2B, NTP-2, NIOSH-X, MAK-A1; Silver – EPA-D; Copper – EPA-D;

LD50/LC50

Values are not appropriate or available.

SECTION 12. ECOLOGICAL INFORMATION

CHEMICAL FATE

Resin bonded materials demonstrate similar degradation rates as Phenolic plastics.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Use Standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

SECTION 14. TRANSPORT INFORMATION

HAZARD CLASS

This product is not hazardous as defined by the Department of Transportation. (USA) This product is “Not Regulated” under the Transportation of Dangerous Goods Act. (CAN)

SECTION 15. REGULATORY INFORMATION

EXPOSURE LIMITS/REGULATORY INFORMATION

| <u>SUBSTANCE DESCRIPTION</u> | <u>UNITS</u> | <u>OSHA</u> | <u>ACGIH</u> | <u>MOL</u> | <u>MAK</u> |
|-------------------------------------|---------------------|--------------------|---------------------|-------------------|-------------------|
| Silver(*) | MG/M3 | 0.0100 | 0.1000 | 0.1000 | 0.0100 |
| Copper(*) | MG/M3 | 0.1000 | 0.2000 | 0.2000 | 0.1000 |
| Graphite Powder | MG/M3 | 10.0000 | 2.0000 | 0.0000 | 6.0000 |
| Silicon Carbide | MG/M3 | 10.0000 | 10.0000 | 10.0000 | 4.0000 |
| Aluminum Oxide | MG/M3 | 10.0000 | 15.0000 | 10.0000 | 6.0000 |
| Nickel(*) | MG/M3 | 1.0000 | 1.0000 | 1.0000 | 0.0000 |
| Calcium Oxide | MG/M3 | 5.0000 | 2.0000 | 0.0000 | 5.0000 |
| Cured Phenol Formaldehyde Resin | PPM | 5.0000 | 5.0000 | 5.0000 | 5.0000 |

SECTION 15. REGULATORY INFORMATION (CONTINUED)

EXPOSURE LIMITS/REGULATORY INFORMATION

| <u>SUBSTANCE DESCRIPTION</u> | <u>UNITS</u> | <u>OSHA</u> | <u>ACGIH</u> | <u>MOL</u> | <u>MAK</u> |
|-------------------------------------|---------------------|--------------------|---------------------|-------------------|-------------------|
| Molybdenum | MG/M3 | 10.0000 | 10.0000 | 10.0000 | 10.0000 |

OTHER

(*) This substance is regulated under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Canadian National Pollution Reduction Initiative (NPRI). The grinding wheel may be comprised of only some of the above.

EXPOSURE LIMIT DESCRIPTIONS

ACGIH=Am. Conf. Govmnt. Ind. Hyg.

MOL= Ministry of Labor, CAN

MAK= FRG Max. Conc. Values

OSHA= Occ. Safety & Health Admin.

CA PROP 65

This product contains chemicals, Nickel is Known to the State of California to cause cancer.

TSCA

Section 8(b) – Inventory Status All Components of this product are registered under the regulations of the Toxic Substance Control Act.

DOMESTIC SUBSTANCE LIST

All components of this product are found on the Domestic Substance List.

SECTION 16. OTHER INFORMATION

DISCLAIMER

The Information and recommendation set forth herein are taken from sources to be accurate as of the date hereof; however, Advanced Superabrasives Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.