Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • **Diamond/CBN Grinding Wheels, Polyimide Wheels**

Relevant identified uses of the substance or mixture and uses advised against

Recommended use
- SuperAbrasive wheels are to be used in ventilated environment on grinders/machines per operating rpm as indicated by supplier. Face protection is recommended for use during grinding operations.

Details of the supplier of the safety data sheet

Manufacturer
- Action Superabrasive Products

945 Greenbriar Parkway
Brimfield, OH 44240
United States
www.actionsuper.com

Telephone (General) • 330-673-7333

Telephone (Technical) • 330-673-7333

Emergency telephone number

Manufacturer
- 330-673-7333

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012
- Not classified

Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

Other hazards

OSHA HCS 2012
- Under United States Regulations (29 CFR 1910.1200(c) - Hazard Communication Standard), the product(s) listed above are exempt as article(s) under stated normal conditions of use.

Other information

- This material, as an article, does not legally require a SDS

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	**Identifiers**	**%**
Aluminum	**CAS:**7429-90-5	60% TO 90%
Graphite	**CAS:**7782-42-5	15% TO 20%
Silicon carbide	**CAS:**409-21-2	1% TO 10%
Nickel	**CAS:**7440-02-0	1% TO 10%
Copper	**CAS:**7440-50-8	1% TO 10%
Tungsten oxide	**CAS:**1314-35-8	1% TO 5%
Tin	**CAS:**7440-31-5	1% TO 5%
Silver	**CAS:**7440-22-4	1% TO 5%
Phenol, polymer with formaldehyde	**CAS:**9003-35-4	1% TO 5%
Glass, oxide, chemicals	**CAS:**65997-17-3	1% TO 5%
Aluminum silicate	**CAS:**1327-36-2	1% TO 5%
Aluminum oxide	**CAS:**1344-28-1	1% TO 5%

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Wash skin with soap and water. If signs/symptoms develop, get medical attention.

Eye
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If contact with material occurs flush eyes with water. If signs/symptoms develop, get medical attention.

Ingestion
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

Most important symptoms and effects, both acute and delayed

- Under normal conditions of use, no health effects are expected.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
- No specific actions or treatments recommended related to exposure to this material.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- In case of fire use media as appropriate for surrounding fire.

For powder fires smother with dry sand, dry dolomite, ABC type fire extinguisher, or flood with water.

Unsuitable Extinguishing Media
- No data available.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Dusts generated in grinding operations may present a fire or explosion hazard under rare favoring conditions of particle size, dispersion and strong ignition source. However, this is not expected to be a problem under normal handling conditions.

Hazardous Combustion Products
- No data available

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions
- No special precautions expected to be necessary if material is used under ordinary conditions and as recommended. If airborne dust is generated, use an appropriate respirator.

Emergency Procedures
- No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

Environmental precautions

- Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

Containment/Clean-up Measures
- Pick up large pieces and sweep up any smaller ones. If dusts are generated, clean up using methods to 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.

Section 7 - Handling and Storage

Precautions for safe handling

Handling
- Use good safety and industrial hygiene practices. Use only with adequate ventilation. Maintain good housekeeping procedures to prevent dust accumulation during grinding. Minimize free fall of powder and avoid dispersion of dust in air. Finely divided particles, dust, or fumes may be flammable or explosive. Avoid dust inhalation and direct skin contact with dust. Do not strike or impact product with hardened steel hammer or similar device because of possible fracture/shattering of product. Product should be pressed if inserted into another metal part or product. Wear appropriate personal protective equipment. Make sure tool is properly seated and safely clamped or held in place according to approved procedures. Always use machine guards and wear safety glasses and protective clothing to prevent injury in the event of tool breakage. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage
- Store in a cool, dry place.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	**ACGIH**	**NIOSH**	**OSHA**
Copper (7440-50-8)	TWAs	0.2 mg/m3 TWA (fume)	1 mg/m3 TWA (dust and mist); 0.1 mg/m3 TWA (fume)	0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dust and mist)
Silver (7440-22-4)	TWAs	0.1 mg/m3 TWA (dust and fume)	0.01 mg/m3 TWA (dust)	0.01 mg/m3 TWA
Aluminum oxide (1344-28-1)	TWAs	Not established	Not established	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Nickel (7440-02-0)	TWAs	1.5 mg/m3 TWA (inhalable fraction)	0.015 mg/m3 TWA	1 mg/m3 TWA
Silicon carbide (409-21-2)	TWAs	10 mg/m3 TWA (nonfibrous, inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica); 3 mg/m3 TWA (nonfibrous, respirable fraction, particulate matter containing no asbestos and <1% crystalline silica); 0.1 fiber/cm3 TWA (as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination., respirable fibers, including whiskers, length >5 µm, aspect ratio >=3:1)	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Tungsten oxide	STELs	10 mg/m3 STEL (as W) *as Tungsten, insoluble compounds*	10 mg/m3 STEL (as W) *as Tungsten, insoluble compounds*	Not established
	TWAs	5 mg/m3 TWA (as W) *as Tungsten, insoluble compounds*	5 mg/m3 TWA (as W) *as Tungsten, insoluble compounds*	Not established
Tin (7440-31-5)	TWAs	2 mg/m3 TWA	2 mg/m3 TWA	Not established
Glass, oxide, chemicals	TWAs	1 fiber/cm3 TWA (respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) *as Glass wool fiber*	3 fiber/cm3 TWA (fibers <= 3.5 µm in diameter and >= 10 µm in length); 5 mg/m3 TWA (total) *as Glass wool fiber*	Not established
Graphite	TWAs	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	2.5 mg/m3 TWA (natural, respirable dust)	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)
Aluminum (7429-90-5)	TWAs	1 mg/m3 TWA (respirable fraction)	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Exposure Control Notations

ACGIH

- Nickel (7440-02-0): **Carcinogens:** (A5 - Not Suspected as a Human Carcinogen)
- Silicon carbide (409-21-2): **Carcinogens:** (A2 - Suspected Human Carcinogen (fibrous, including whiskers))
- Aluminum (7429-90-5): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Aluminum as Aluminum insoluble compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Glass, oxide, chemicals as Glass wool fiber: **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Synthetic vitreous fibers))

Exposure Limits Supplemental

OSHA

•Graphite (7782-42-5): **Mineral Dusts:** (15 mppcf TWA (natural))

ACGIH

•Nickel (7440-02-0): **TLV Basis - Critical Effects:** (dermatitis; pneumoconiosis)

•Tin (7440-31-5): **TLV Basis - Critical Effects:** (pneumoconiosis (or stannosis))

•Graphite (7782-42-5): **TLV Basis - Critical Effects:** (pneumoconiosis (all forms except graphite fibers))

•Silver (7440-22-4): **TLV Basis - Critical Effects:** (argyria)

•Silicon carbide (409-21-2): **TLV Basis - Critical Effects:** (upper respiratory tract irritation (nonfibrous); cancer (fibrous, including whiskers); mesothelioma (fibrous, including whiskers))

•Aluminum (7429-90-5): **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)

•Aluminum as Aluminum insoluble compounds: **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)

•Copper (7440-50-8): **TLV Basis - Critical Effects:** (metal fume fever (fume))

•Copper as Copper compounds: **TLV Basis - Critical Effects:** (gastrointestinal (dust and mist); irritation (dust and mist))

•Tungsten oxide as Tungsten, insoluble compounds: **TLV Basis - Critical Effects:** (lower respiratory tract irritation)

Exposure controls

Engineering Measures/Controls	• Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
Personal Protective Equipment	
Respiratory	• In case of insufficient ventilation, wear suitable respiratory equipment.
Eye/Face	• Wear safety glasses.
Skin/Body	• Wear appropriate gloves.
Environmental Exposure Controls	• Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Green to a yellowish brown solid that may give off an ammonia odor while grinding.
Color	Green to yellowish brown.	Odor	Ammonia
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	> 1 @ 4 C(39.2 F) Water=1	Water Solubility	No data available
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available

Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available.

Incompatible materials

- Avoid acids of all types with a pH <4.0.

Hazardous decomposition products

- None

Section 11 - Toxicological Information

Information on toxicological effects

Other Material Information

- Note: Health effects listed are for exposure powders, dust, or mist from grinding. No health effects have been reported for exposure in solid form.

GHS Properties	Classification
Respiratory sensitization	**OSHA HCS 2012** • No data available
Serious eye damage/Irritation	**OSHA HCS 2012** • No data available
Acute toxicity	**OSHA HCS 2012** • No data available
Aspiration Hazard	**OSHA HCS 2012** • No data available
Carcinogenicity	**OSHA HCS 2012** • No data available
Skin corrosion/Irritation	**OSHA HCS 2012** • No data available
Skin sensitization	**OSHA HCS 2012** • No data available
STOT-RE	**OSHA HCS 2012** • No data available
STOT-SE	**OSHA HCS 2012** • No data available
Toxicity for Reproduction	**OSHA HCS 2012** • No data available
Germ Cell Mutagenicity	**OSHA HCS 2012** • No data available

Potential Health Effects

Inhalation

Acute (Immediate)
- Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)
- No data available

Eye

Acute (Immediate)
- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)
- No data available

Ingestion

Acute (Immediate)
- No data available

Chronic (Delayed)
- No data available

Carcinogenic Effects
- This material does contain a component that may cause cancer. Due to the form of the product, exposure to the potentially carcinogenic components is not expected.

Carcinogenic Effects			
	CAS	IARC	NTP
Nickel	7440-02-0	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen
Silicon carbide	409-21-2	Group 2A-Probable Carcinogen	Not Listed

Section 12 - Ecological Information

Toxicity

- No ecological data is available for this product.

Persistence and degradability

- No ecological data is available for this product.

Bioaccumulative potential

- No ecological data is available for this product.

Mobility in Soil

- No ecological data is available for this product.

Other adverse effects

- No hazards to the environment are expected from this product. However, consideration must be given to potential environment effects of the base material being processed.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user
- None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
- None

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Aluminum	7429-90-5	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	Yes	Yes
Aluminum silicate	1327-36-2	No	No	No
Copper	7440-50-8	Yes	Yes	Yes
Glass, oxide, chemicals	65997-17-3	No	No	No
Graphite	7782-42-5	Yes	Yes	Yes
Nickel	7440-02-0	Yes	Yes	Yes
Phenol, polymer with formaldehyde	9003-35-4	No	No	No
Silicon carbide	409-21-2	Yes	Yes	Yes
Silver	7440-22-4	Yes	Yes	Yes
Tin	7440-31-5	Yes	Yes	Yes
Tungsten oxide	1314-35-8	No	No	No

Inventory		
Component	**CAS**	**TSCA**
Aluminum	7429-90-5	Yes
Aluminum oxide	1344-28-1	Yes
Aluminum silicate	1327-36-2	Yes
Copper	7440-50-8	Yes
Glass, oxide, chemicals	65997-17-3	Yes
Graphite	7782-42-5	Yes
Nickel	7440-02-0	Yes
Phenol, polymer with formaldehyde	9003-35-4	Yes
Silicon carbide	409-21-2	Yes
Silver	7440-22-4	Yes
Tin	7440-31-5	Yes
Tungsten oxide	1314-35-8	Yes

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100

• Copper	7440-50-8	µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Silver	7440-22-4	1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	100 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed

• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	1.0 % de minimis concentration
• Silver	7440-22-4	1.0 % de minimis concentration
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	1.0 % de minimis concentration (fibrous forms)
• Aluminum	7429-90-5	1.0 % de minimis concentration (dust or fume only)
• Nickel	7440-02-0	0.1 % de minimis concentration
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Included in waste stream: F039
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Included in waste streams: F006, F039
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	(total)
• Silver	7440-22-4	(total)
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	(total)
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Tox Characteristic

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	5.0 mg/L regulatory level
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	hazardous constituent - no waste number
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed

• Nickel	7440-02-0	hazardous constituent - no waste number
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	(total)
• Silver	7440-22-4	(total)
• Tin	7440-31-5	(total)
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	(total)
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	0.43 mg/L (wastewater); 0.14 mg/L TCLP (nonwastewater)
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	3.98 mg/L (wastewater); 11.0 mg/L TCLP (nonwastewater)
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	(total)
• Silver	7440-22-4	(total)
• Tin	7440-31-5	(total)
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	(total)
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	carcinogen, initial date 10/1/89 (metallic)
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed

• Graphite	7782-42-5	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	(dust and fume)
• Silver	7440-22-4	
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	
• Aluminum	7429-90-5	
• Nickel	7440-02-0	
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Tungsten oxide	1314-35-8	Not Listed
• Aluminum silicate	1327-36-2	Not Listed
• Copper	7440-50-8	Not Listed
• Silver	7440-22-4	Not Listed
• Tin	7440-31-5	Not Listed
• Aluminum oxide	1344-28-1	Not Listed

• Aluminum	7429-90-5	Not Listed
• Nickel	7440-02-0	
• Silicon carbide	409-21-2	Not Listed
• Phenol, polymer with formaldehyde	9003-35-4	Not Listed
• Glass, oxide, chemicals	65997-17-3	Not Listed
• Graphite	7782-42-5	Not Listed

Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Revision Date
- 29/October/2015

Preparation Date
- 21/March/2005

Disclaimer/Statement of Liability
- Although Action Superabrasive Products has attempted to provide current and accurate information herein, Action Superabrasive Products makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person. It shall be the responsibility of the customer purchasing this product to ensure that all employees/users of this product are familiar with and trained in the handling, use and hazards associated with this product as contained herein. This responsibility shall also extend directly to the user.

Key to abbreviations

NDA = No Data Available