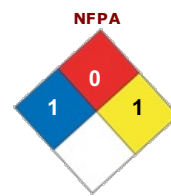




SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: Super Abrasive
MSDS Manufacturer Number: SAAI
Manufacturer Name: Saint-Gobain Abrasives, Inc.
Address: 1 New Bond Street
 Worcester, MA 01615
General Phone Number: 508-795-5000
Emergency Phone Number: 508-795-5000
Website: www.Nortonabrasives.com
MSDS Creation Date: July 27, 2011
MSDS Revision Date: July 01, 2013



HMIS	
Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	X

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Aluminum Oxide, Non-fibrous	1344-28-1	10 - 30 by weight	215-691-6
Silicon carbide	409-21-2	1 - 5 by weight	206-991-8
Phenol formaldehyde polymer	9003-35-4	1 - 5 by weight	
Cubic Boron Nitride (CBN)	10043-11-5	1 - 5 by weight	233-136-6
Aluminum	7429-90-5	60 - 100 by weight	231-072-3

SECTION 3 : HAZARDS IDENTIFICATION

Potential Health Effects:

- Eye:** Dust may cause slight irritation.
- Skin:** Dust from this product may cause temporary mechanical irritation.
- Inhalation:** Dusts from this product may cause mechanical irritation of the nose, throat and respiratory tract.
- Ingestion:** Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.
- Chronic Health Effects:** Chronic health effects are not expected as long as good hygiene and proper safety precautions are practiced.

Phenol formaldehyde polymer

- Chronic Health Effects:** Dust generated from intended use may contain trace amounts of phenol and formaldehyde which under excessive exposure may cause skin sensitization and airway obstruction.

SECTION 4 : FIRST AID MEASURES

- Eye Contact:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention, if irritation or symptoms of overexposure persists.
- Skin Contact:** Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
- Inhalation:** If dust from cutting or drilling is inhaled, remove the affected person to fresh air. If symptoms persist, get medical attention.

Ingestion: Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. If symptoms persist, call a physician.

Note to Physicians: No information available.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties: Non Flammable.

Flash Point: Does not apply.

Auto Ignition Temperature: Not determined.

Lower Flammable/Explosive Limit: Not available.

Upper Flammable/Explosive Limit: Not available.

Extinguishing Media: Use any extinguishing media appropriate for the surrounding fires.

Unsuitable Media: None.

Protective Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Health: 1

NFPA Flammability: 0

NFPA Reactivity: 1

NFPA Other:

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Methods for containment: Containment of this material should not be necessary.

Methods for cleanup: Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions. Evaluate residue to determine if it is a hazardous waste by characteristic. Dispose of in accordance with Local, State, Federal and Provincial regulations.

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.

Storage: No special storage conditions required.

Hygiene Practices: Wear suitable gloves and eye/face protection.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls: General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.

Eye/Face Protection: Always WEAR SAFETY GLASSES or some type of eye protection when grinding.

Skin Protection Description: Protective gloves. Long sleeved shirt and long pants.

Respiratory Protection: When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators. A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.

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

EXPOSURE GUIDELINES

Ingredient	GERMAN MAK	Guideline OSHA	Guideline NIOSH	Guideline ACGIH	Quebec Canada
Aluminum Oxide, Non-fibrous		PEL-TWA: 5 mg/m3 Respirable fraction (R) PEL-TWA: 15 mg/m3 Total particulate/dust (T)		TLV-TWA: 10 mg/m3	VEMP-TWA: 10 mg/m3 Total particulate/dust (T)
Silicon carbide		PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)		TLV-TWA: 10 mg/m3 Inhalable fraction (I) TLV-TWA: 3 mg/m3 Respirable fraction (R) TLV-TWA: 0.1 f/cc Respirable fraction (R)	VEMP-TWA: 10 mg/m3 Total particulate/dust (T)
Aluminum	MAK-TWA: 1.5 mg/m3 Respirable fraction (R)	PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)	REL-TWA: 10 mg/m3 Total particulate/dust (T)	TLV-TWA: 1 mg/m3 Respirable fraction (R) TLV-TWA: 1 mg/m3 Respirable fraction (R) TLV-TWA: 2 mg/m3 TLV-TWA: 10 mg/m3	VEMP-TWA: 2 mg/m3 VEMP-TWA: 10 mg/m3 VEMP-TWA: 5 mg/m3 VEMP-TWA: 2 mg/m3 VEMP-TWA: 5 mg/m3

				TLV-TWA: 5 mg/m ³ TLV-TWA: 2 mg/m ³	
Ingredient	Poland	Ontario Canada	Alberta Canada	Mexico	British Columbia Canada
Aluminum Oxide, Non-fibrous		OEL-TWAEV: 10 mg/m ³ Total particulate/dust (T)	OEL-TWA: 10 mg/m ³	MPE-PPT: 0.1 mg/m ³ Respirable fraction (R)	OEL-TWA: 3 mg/m ³ Respirable fraction (R) OEL-TWA: 10 mg/m ³ Total particulate/dust (T) OEL-STEL: 20 mg/m ³ Total particulate/dust (T)
Silicon carbide		OEL-TWAEV: 10 mg/m ³ Total particulate/dust (T) OEL-TWAEV: 3 mg/m ³ Respirable fraction (R) OEL-TWAEV: 10 mg/m ³ Inhalable fraction (I) OEL-TWAEV: 0.1 f/cc Respirable fraction (R)	OEL-TWA: 10 mg/m ³	LMPE-PPT: 10 mg/m ³ LMPE-CT: 20 mg/m ³	OEL-TWA: 10 mg/m ³ Inhalable fraction (I) OEL-TWA: 3 mg/m ³ Respirable fraction (R) OEL-TWA: 0.1 f/cc Respirable fraction (R)
Aluminum	MAC-TWA: 1.2 mg/m ³ Respirable fraction (R)		OEL-TWA: 2 mg/m ³ OEL-TWA: 10 mg/m ³ OEL-TWA: 5 mg/m ³ OEL-TWA: 2 mg/m ³ OEL-TWA: 5 mg/m ³	LMPE-PPT: 2 mg/m ³ LMPE-PPT: 10 mg/m ³ LMPE-PPT: 5 mg/m ³ LMPE-PPT: 2 mg/m ³ LMPE-PPT: 5 mg/m ³	OEL-TWA: 2 mg/m ³ OEL-TWA: 3 mg/m ³ Respirable fraction (R) OEL-TWA: 10 mg/m ³ Total particulate/dust (T) OEL-TWA: 5 mg/m ³ OEL-TWA: 2 mg/m ³

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Solid article.
Odor:	Odorless.
Flash Point:	Does not apply.
Auto Ignition Temperature:	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	Keep away from heat, sparks, or open flame.
Special Decomposition Products:	In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.

SECTION 11 : TOXICOLOGICAL INFORMATION

Acute Toxicity: This product has not been tested for its toxicity.

Aluminum Oxide, Non-fibrous :

NIOSH:	No Data
OSHA:	No Data
IARC:	No Data
NTP:	No Data

Aluminum Oxide, Non-fibrous :

RTECS Number: BD1200000

Inhalation: Inhalation - Rat TCLO: 200 mg/m³/5H/28W (Intermittent) [Lungs, Thorax, or Respiration - Structural or functional change in trachea or bronchi; Lungs, Thorax, or Respiration - Chronic pulmonary edema; Related to Chronic Data - death] (RTECS)

Silicon carbide :

RTECS Number: VW0450000

Inhalation: No Data

Phenol formaldehyde polymer :

RTECS Number: SM8542500

Skin: Administration onto the skin - Rat LD50 : >2 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 : >5 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Cubic Boron Nitride (CBN) :

RTECS Number: ED7850000

Aluminum :

RTECS Number: BD1020000

SECTION 12 : ECOLOGICAL INFORMATION

Biodegradation: In harsh environments, metal bonded products will decay similar to their metallic components.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal: Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Not regulated as hazardous material for transportation.

DOT UN Number: Not regulated as hazardous material for transportation.

IATA Shipping Name: Not regulated as hazardous material for transportation.

Canadian Shipping Name: This product is Not Regulated under the Transportation of Dangerous Goods Act. (CAN).

SECTION 15 : REGULATORY INFORMATION

Inventory Status

	EINECS Number	Canada DSL	TSCA Inventory Status		
Aluminum Oxide, Non-fibrous	215-691-6	Listed	Listed		
Silicon carbide	206-991-8	Listed	Listed		
Phenol formaldehyde polymer		Listed	Listed		
Cubic Boron Nitride (CBN)		Listed	Listed		
Aluminum		Listed	Listed		

Aluminum Oxide, Non-fibrous :

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.50(1298)

Aluminum :

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.47(197)

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Aluminum Oxide, Non-fibrous :

EC Number: 215-691-6

Silicon carbide :

EC Number: 206-991-8

Cubic Boron Nitride (CBN) :

EC Number: 233-136-6

Aluminum :

EC Number: 231-072-3

State Right To Know

	PA	MA	NJ		
Aluminum Oxide, Non-fibrous	Listed	Listed	Listed: NJ Hazardous List; Substance Number: 2891		
Silicon carbide	Listed	Listed			
Aluminum	Listed	Listed	Listed: NJ Hazardous List; Substance Number: 0054		

SECTION 16 : ADDITIONAL INFORMATION

MSDS Creation Date: July 27, 2011

MSDS Revision Date: July 01, 2013

