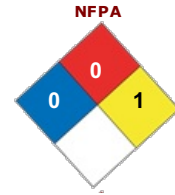


SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Vitrified Abrasive Product**
MSDS Manufacturer Number: BA_Vit
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: December 15, 2010
MSDS Revision Date: July 01, 2013



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

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Aluminum Oxide, Non-fibrous	1344-28-1	60.0 - 100 by weight	215-691-6
Amorphous Silica, Fused	60676-86-0	10.0 - 30 by weight	262-373-8
Titanium dioxide	13463-67-7	1.0 - 5 by weight	236-675-5

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: May affect breathing capacity.

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: 0

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. Always CHECK MOUNTING FLANGES for equal and correct diameter. Always USE MOUNTING BLOTTERS. 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.

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).

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Avoid getting dust into boots and gloves through wrist bands and pant tucks.

EXPOSURE GUIDELINES

Ingredient	Guideline OSHA	Guideline NIOSH	Guideline ACGIH	Quebec Canada	Ontario 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)	OEL-TWAEV: 10 mg/m3 Total particulate/dust (T)
Amorphous Silica, Fused	OSHA PEL-TWA 0.1 mg/m3	REL-TWA: 0.05 mg/m3 (Respirable)	ACGIH TLV-TWA 0.1 mg/m3	VEMP-TWA: 0.1 mg/m3 Respirable fraction (R)	OEL-TWAEV: 0.1 mg/m3 Respirable fraction (R)
Titanium dioxide			TLV-TWA: 10 mg/m3	VEMP-TWA: 10 mg/m3 Total particulate/dust (T)	OEL-TWAEV: 10 mg/m3 Total particulate/dust (T)
Ingredient	Alberta Canada	Mexico	British Columbia Canada		
Aluminum Oxide, Non-fibrous	OEL-TWA: 10 mg/m3	MPE-PPT: 0.1 mg/m3 Respirable fraction (R)	OEL-TWA: 3 mg/m3 Respirable fraction (R) OEL-TWA: 10 mg/m3 OEL-TWA: 10 mg/m3 Total particulate/dust (T) OEL-STEL: 20 mg/m3 Total particulate/dust (T)		
Amorphous Silica, Fused	OEL-TWA: 0.1 mg/m3 Respirable fraction (R)	MPE-PPT: 0.1 mg/m3 Respirable fraction (R)			

Titanium dioxide	OEL-TWA: 10 mg/m3 Total particulate/dust (T)	MPE-PPT: 0.1 mg/m3 Respirable fraction (R)	OEL-TWA: 10 mg/m3 Total particulate/dust (T) OEL-TWA: 3 mg/m3 Respirable fraction (R)		
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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.
 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.

Carcinogens:						
	ACGIH	NIOSH	OSHA	IARC	NTP	
Aluminum Oxide, Non-fibrous	A4 Not Classifiable as a Human Carcinogen	No Data	No Data	No Data	No Data	
Amorphous Silica, Fused	No Data	NIOSH carcinogen	No Data	No Data	No Data	
Titanium dioxide	No Data	No Data	No Data	No Data	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)

Amorphous Silica, Fused :

RTECS Number: VV7328000

Inhalation: Inhalation - Rat TCLo: 197 mg/m3/6H/26W (Intermittent) [Lungs, Thorax, or Respiration - Changes in lung weight] (RTECS)

Titanium dioxide :

RTECS Number: XR2275000

Skin: Skin - Human Standard Draize test. : 300 ug/3D-I - [mild] (RTECS)

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration: 1 mg/kg - [Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (Intermediary) - Effect on inflammation or mediation of inflammation] (RTECS)

Ingestion: Oral - Rodent rat TDLo - Lowest published toxic dose: 60 gm/kg - [Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes] (RTECS)

SECTION 12 : ECOLOGICAL INFORMATION

Biodegradation: No environmental information found for this product.

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	262-373-8	Listed	Listed		
Amorphous Silica, Fused	262-373-8	Listed	Listed		
Titanium dioxide		Listed	Listed		

Aluminum Oxide, Non-fibrous :

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

Amorphous Silica, Fused :

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1404(1487)

Aluminum Oxide, Non-fibrous :

EC Number: 215-691-6

Amorphous Silica, Fused :

EC Number: 262-373-8

Titanium dioxide :

EC Number: 236-675-5

State Right To Know

	RI	MN	IL	PA	MA
Aluminum Oxide, Non-fibrous	Listed	Listed	No Data	Listed	Listed
Amorphous Silica, Fused	Listed				Listed
Titanium dioxide	Listed	Listed	No Data	Listed	Listed

	NJ				
Aluminum Oxide, Non-fibrous	Listed: NJ Hazardous List; Substance Number: 2891				
Titanium dioxide	No Data				

SECTION 16 : ADDITIONAL INFORMATION

MSDS Creation Date: December 15, 2010

MSDS Revision Date: July 01, 2013

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