

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Abrasive Product Product Name:

MSDS Manufacturer Number: TW_All

Manufacturer Name: Saint-Gobain Abrasives, Inc. 1 New Bond Street Address: Worcester, MA 01615

General Phone Number: 508-795-5000 Emergency Phone Number: 508-795-5000

Website:

www.Nortonabrasives.com August 15, 2009

MSDS Creation Date: 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.	
Calcium carbonate	1317-65-3	1 - 5 by weight	215-279-6	
Fiberglass	65997-17-3	1 - 5 by weight	266-046-0	
Silicon carbide	409-21-2	30 - 60 by weight	206-991-8	
Crystalline Silica, Quartz	14808-60-7	0 - 1 by weight	238-878-4	
Phenol formaldehyde polymer	9003-35-4	10 - 30 by weight		
Sulfates/Sulfides	No Data	1 - 5 by weight		
Aluminum Oxide, Non-fibrous	1344-28-1	10 - 30 by weight	215-691-6	
Amorphous Silica, Fused	60676-86-0	5 - 10 by weight	262-373-8	
Titanium dioxide	13463-67-7	0 - 1 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

Chronic Health Effects: Chronic health effects are not expected as long as good hygiene and proper safety precautions are

<u>Fiberglass</u>

Inhalation: Fiberglass contained in wheels have fiber diameters greater than 10 um, therefore considered non-

respirable.

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

Eve 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.

Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists. Skin Contact:

Inhalation: If dust from cutting or drilling is inhaled, remove the affected person to fresh air. If symptoms persist,

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.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or Protective Equipment:

equivalent) and full protective gear.

NFPA Ratings:

NFPA Health: NFPA Flammability: 0 NFPA Reactivity:

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.

No special storage conditions required. Storage:

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

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

General dilution ventilation and/or local exhaust ventilation should be provided as necessary to **Engineering Controls:**

maintain exposures below occupational exposure limits.

Eve/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 respirato

A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.

UPC Number: 66252843600 TW AI

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).

Handle in accordance with good industrial hygiene and safety practice. General Hygiene Considerations:

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	
Calcium carbonate				VEMP-TWA: 10 mg/m3 Total particulate/dust (T)		
Fiberglass	PEL-TWA: 1 f/cc as Continuous filament glass		TLV-TWA: 1 f/cc as Continuous filament glass TLV-TWA: 5 mg/m3 as Continuous filament glass			
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)	OEL-TWAEV: 10 mg/m3 Total particulate/dust (T) OEL-TWAEV: 3 mg/m3 Respirable fraction (R) OEL-TWAEV: 10 mg/m3 Inhalable fraction (I) OEL-TWAEV: 0.1 f/cc Respirable fraction (R)	
Crystalline Silica, Quartz			TLV-TWA: 0.025 mg/m3 Respirable fraction (R)	VEMP-TWA: 0.1 mg/m3 Respirable fraction (R)	OEL-TWAEV: 0.05 mg/m3 Respirable fraction (R)	
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			
Calcium carbonate	OEL-TWA: 10 mg/m3		OEL-TWA: 10 mg/m3 Total particulate/dust (T) OEL-TWA: 3 mg/m3 Respirable fraction (R) OEL-STEL: 20 mg/m3 Total particulate/dust (T)			
Silicon carbide	OEL-TWA: 10 mg/m3	LMPE-PPT: 10 mg/m3 LMPE-CT: 20 mg/m3	OEL-TWA: 10 mg/m3 Inhalable fraction (I) OEL-TWA: 3 mg/m3 Respirable fraction (R) OEL-TWA: 0.1 f/cc Respirable fraction (R)			
Crystalline Silica, Quartz	OEL-TWA: 0.1 mg/m3 Respirable fraction (R)	LMPE-PPT: 0.1 mg/m3 Respirable fraction (R)	OEL-TWA: 0.025 mg/m3 Respirable fraction (R)			
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)			

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.

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. ${\bf Special\ Decomposition\ Products:}$

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	

<u>Calcium carbonate</u>:

RTECS Number: FV9580000

Fiberglass:

RTECS Number: LK3651000

Silicon carbide:

RTECS Number: VW0450000 Inhalation: No Data

Crystalline Silica, Quartz:

RTECS Number: VV7330000

Phenol formaldehyde polymer:

SM8542500 RTECS Number:

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

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

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

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

lung weight] (RTECS)

<u>Titanium dioxide</u>:

RTECS Number: XR2275000

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

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

inflammation] (RTECS)

Oral - Rodent rat TDLo - Lowest published toxic dose: 60 gm/kg - [Gastrointestinal - Hypermotility, Inaestion:

diarrhea Gastrointestinal - Other changes] (RTECS)

SECTION 12: ECOLOGICAL INFORMATION

Biodegradation: Vitrified products do not appreciably decay.

SECTION 13: DISPOSAL CONSIDERATIONS

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

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

<u>Calcium carbonate</u>:

TSCA Inventory Status: Listed

Massachusetts: Listed

Pennsylvania: Listed

Canada NDSL: Listed

EC Number: 215-279-6

Fiberglass:

TSCA Inventory Status: Listed

Canada DSL: Listed

EC Number: 266-046-0

Silicon carbide:

TSCA Inventory Status: Listed

Massachusetts: Listed

Pennsylvania: Listed

Canada DSL: Listed

EC Number: 206-991-8

Crystalline Silica, Quartz:

TSCA Inventory Status: Listed

Massachusetts: Listed

Pennsylvania: Listed

Canada DSL: Listed

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1406(1491)

EC Number: 238-878-4

Phenol formaldehyde polymer:

TSCA Inventory Status: Listed
Canada DSL: Listed

Aluminum Oxide, Non-fibrous:

TSCA Inventory Status: Listed
EINECS Number: 262-373-8

New Jersey: Listed: NJ Hazardous List; Substance Number: 2891

Massachusetts: Listed
Pennsylvania: Listed
Minnesota: Listed
Illinois: No Data
Rhode Island: Listed
Canada DSL: Listed

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

EC Number: 215-691-6

Amorphous Silica, Fused:

TSCA Inventory Status: Listed

EINECS Number: 262-373-8

Massachusetts: Listed

Rhode Island: Listed

Canada DSL: Listed

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

EC Number: 262-373-8

<u>Titanium dioxide</u>:

TSCA Inventory Status: Listed No Data New Jersey: Listed Massachusetts: Pennsylvania: Listed Minnesota: Listed Illinois: No Data Rhode Island: Listed Canada DSL: Listed EC Number: 236-675-5

SECTION 16: ADDITIONAL INFORMATION

MSDS Creation Date: August 15, 2009
MSDS Revision Date: July 01, 2013

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Abrasive Product Revision: 07/01/2013