SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name:	**Coated Finished Flap Discs**
Product Code:	Coated
UPC Number:	08834193658

Other means of identification:

Recommended use of the chemical and restrictions on use:

Product Use/Restriction:	Abrasive Product.

Chemical manufacturer address and telephone number:

Manufacturer Name:	Saint-Gobain Abrasives, Inc.
Address:	1 New Bond Street Worcester, MA 01615
Website:	www.Nortonabrasives.com
General Phone Number:	508-795-5000

Emergency phone number:

Emergency Phone Number:	508-795-5000

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

Signal Word:	Not applicable.
GHS Class:	Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200
Hazard Statements:	Not applicable.
Precautionary Statements:	Not applicable.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Eye:	Causes eye irritation.
Skin:	Causes skin irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated contact may cause skin irritation.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	None generally recognized.

Fiberglass

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

Resin

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 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Titanium dioxide	13463-67-7	0 - 1 by weight	
Starch	65996-63-6	1 - 5 by weight	
Liquefied petroleum gas	68476-85-7	1 - 5 by weight	
Heptane	142-82-5	5 - 10 by weight	
Phenol	108-95-2	5 - 10 by weight	203-632-7
Crystalline Silica, Quartz	14808-60-7	1 - 5 by weight	238-878-4
Formaldehyde	50-00-0	5 - 10 by weight	200-001-8
Epoxy resin	25068-38-6	5 - 10 by weight	
Fiberglass	65997-17-3	10 - 30 by weight	266-046-0
Titanium dioxide	13463-67-7	0 - 1 by weight	236-675-5
Calcium carbonate	1317-65-3	5 - 10 by weight	215-279-6
Aliphatic Amines	No Data	1 - 5 by weight	
Aluminum Oxide, Non-fibrous	1344-28-1	10 - 30 by weight	215-691-6
Resin	9003-35-4	5 - 10 by weight	

SECTION 4 : FIRST AID MEASURES

Description of necessary 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. Remove contacts if present and easy to do. Continue rinsing. 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 inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed:

Other First Aid: Not applicable.

Indication of immediate medical attention and special treatment needed:

Note to Physicians: Not applicable.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.

Unsuitable extinguishing media: Not applicable.

Specific hazards arising from the chemical:

Hazardous Combustion Byproducts: Not applicable.

Unusual Fire Hazards: Not applicable.

Special protective equipment and precautions for fire-fighters:

Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

Fire Fighting Instructions: Not applicable.

NFPA Ratings:

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personnel Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use proper personal protective equipment as listed in Section 8.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures: Not applicable.

Methods and materials for containment and cleaning up:

Methods for containment: Contain spills with an inert absorbent material such as soil or sand. Prevent from spreading by covering, diking or other means. Provide ventilation.

Methods for cleanup: Clean up spills immediately observing precautions in the protective equipment section. Place into a suitable container for disposal. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

Reference to other sections:

Other Precautions: Not applicable.

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.

Hygiene Practices: Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

Conditions for safe storage, including any incompatibilities:

Storage: Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Ingredient	Guideline OSHA	Guideline ACGIH	Quebec Canada	Ontario Canada	Alberta Canada
Phenol	PEL-TWA: 5 ppm Skin: Yes.	TLV-TWA: 5 ppm Skin: Yes.	VEMP-TWA: 5 ppm Skin: Yes.		OEL-TWA: 5 ppm Skin: Yes.
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)	OEL-TWA: 0.1 mg/m3 Respirable fraction (R)
Formaldehyde	PEL-TWA: 0.75 ppm PEL-STEL: 2 ppm	TLV-Ceiling/Peak: 0.3 ppm Sensitizer.: Sen	VEMP-Ceiling/Peak: 2 ppm	OEL-CEV: 0.3 ppm	OEL-TWA: 0.75 ppm OEL-Ceiling/Peak: 2 ppm
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			
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)	OEL-TWA: 10 mg/m3 Total particulate/dust (T)
Calcium carbonate			VEMP-TWA: 10 mg/m3 Total particulate/dust (T)		OEL-TWA: 10 mg/m3
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)	OEL-TWA: 10 mg/m3

Ingredient	Mexico	Ireland	Finland	Czech Republic	British Columbia Canada
Phenol	LMPE-PPT: 5 ppm LMPE-CT: 10 ppm Skin: Yes.				OEL-TWA: 5 ppm Skin: Yes.
Crystalline Silica, Quartz	LMPE-PPT: 0.1 mg/m3 Respirable fraction (R)				OEL-TWA: 0.025 mg/m3 Respirable fraction (R)
Formaldehyde	LMPE-CT/Pico: 2 ppm	OELV-STEL: 2 ppm	Skin: Yes.	OEL-TWA: 0.5 mg/m3 Sensitizer.: Sen	OEL-TWA: 0.3 ppm Sensitizer.: Sen
Titanium dioxide	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)
Calcium carbonate					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)
Aluminum Oxide, Non-fibrous	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)
Ingredient	**Belgium**	**Australia**			
Formaldehyde	OEL-STEL: 0.3 ppm	NES-TWA: 1 ppm NES-STEL: 2 ppm			

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection Description: Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PPE Pictograms:

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance:	Solid article.
Color:	Not determined.
Odor:	Odorless.
Odor Threshold:	Not determined.
Boiling Point:	Not determined.
Melting Point:	Not determined.
Density:	Not determined.
Solubility:	Not determined.
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Evaporation Rate:	Not determined.
pH:	Not determined.
Viscosity:	Not determined.
Coefficient of Water/Oil Distribution:	Not determined.
Flammability:	Not determined.
Flash Point:	None.
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
Auto Ignition Temperature:	Not applicable.
Explosive Properties:	Excessive dust accumulation could present a potential combustible dust hazard.
VOC Content:	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Reactivity:

Reactivity: Not applicable.

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures.

Possibility of hazardous reactions:

Hazardous Polymerization: Not reported.

Conditions To Avoid:

Conditions to Avoid: Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.

Incompatible Materials:

Incompatible Materials: Oxidizing agents. Strong acids and alkalis.

Hazardous Decomposition Products:

Special Decomposition Products: Not applicable.

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

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

Carcinogens:							
	ACGIH	NIOSH	OSHA	IARC	NTP		MEXICO
Aluminum Oxide, Non-fibrous	A4 Not Classifiable as a Human Carcinogen	No Data	No Data	No Data	No Data		A4 Not Classifiable as a Human Carcinogen

Phenol :

RTECS Number: SJ3325000

Eye: Eye - Rabbit Standard Draize test.: 5 mg
Eye - Rabbit Rinsed with water.: 5 mg/30S (RTECS)

Skin: Administration onto the skin - Rabbit Open irritation test: 535 mg
Administration onto the skin - Rabbit Standard Draize test.: 100 mg
Administration onto the skin - Rat LD50: 669 mg/kg [Behavioral - Tremor Kidney/Ureter/Bladder - Hematuria Skin and Appendages - Cutaneous sensitization, experimental (After topical exposure)]
Administration onto the skin - Rat LD50: 1500 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Inhalation: Inhalation - Mouse LC50: 177 mg/m3 [Details of toxic effects not reported other than lethal dose value]
Inhalation - Rat LC50: 316 mg/m3 [Details of toxic effects not reported other than lethal dose value]
Inhalation - Mouse LC50: 177 mg/m3/4H [Details of toxic effects not reported other than lethal dose value]
Inhalation - Rat LC50: 316 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50: 317 mg/kg [Behavioral - Convulsions or effect on seizure threshold]
Oral - Mouse LD50: 270 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Rat LD50: 512 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Crystalline Silica, Quartz :

RTECS Number: VV7330000

Formaldehyde :

RTECS Number: LP8925000

Eye: Eye - Rabbit Standard Draize test.: 750 ug/24H
Eye - Rabbit Standard Draize test.: 750 ug
Eye - Rabbit Standard Draize test.: 10 mg
Eye - Rabbit Standard Draize test.: 37% (RTECS)

Skin: Administration onto the skin - Rabbit Standard Draize test.: 2 mg/24H
Administration onto the skin - Rabbit Open irritation test: 540 mg
Administration onto the skin - Rabbit Standard Draize test.: 50 mg/24H (RTECS)

Inhalation: Inhalation - Rat LC50: 250 ppm/4H [Details of toxic effects not reported other than lethal dose value]
Inhalation - Rat LC50: 815 ppm/0.5H [Details of toxic effects not reported other than lethal dose value]
Inhalation - Rat LC50: 203 mg/m3 [Peripheral Nerve and Sensation - Spastic paralysis with or without sensory change Behavioral - Convulsions or effect on seizure threshold Behavioral - Excitement]
Inhalation - Mouse LC50: 454 mg/m3/4H [Details of toxic effects not reported other than lethal dose value]
Inhalation - Mouse LC50: 505 mg/m3/2H [Behavioral - Tetany Behavioral - Coma Lungs, Thorax, or Respiration - Acute pulmonary edema]
Inhalation - Rat LC50: 578 mg/m3/2H [Behavioral - Tetany Behavioral - Coma Lungs, Thorax, or Respiration - Acute pulmonary edema]
Inhalation - Rat LC50: 250 ppm/2H [Behavioral - Tetany Behavioral - Coma Lungs, Thorax, or Respiration - Acute pulmonary edema] (RTECS)

Ingestion: Oral - Rat LD50: 100 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Mouse LD50: 42 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Convulsions or effect on seizure threshold Behavioral - Excitement]
Oral - Mouse LD50: 385 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Mouse LD50: 500 mg/kg [Behavioral - Tremor Liver - Other changes Kidney/Ureter/Bladder - Other changes]
Oral - Rat LD50: 500 mg/kg [Behavioral - Tremor Liver - Other changes Kidney/Ureter/Bladder - Other changes] (RTECS)

Carcinogenicity: IARC: Group 1: Carcinogenic to humans.
NTP: Reasonably anticipated to be a human carcinogen.
OSHA: Designated carcinogen

Epoxy resin :

RTECS Number: SL6475000

Eye: Eye - Rabbit Standard Draize test.: 100 mg [mild] (RTECS)

Ingestion: Oral - Rat LD50 : 11400 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain] Oral - Mouse LD50 : 15600 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain] (RTECS)

Fiberglass :

RTECS Number: LK3651000

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)

Calcium carbonate :

RTECS Number: EV9580000

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)

Resin :

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)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: Please contact the phone number or address of the manufacturer listed in Section 1 for information on ecotoxicity.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 : TRANSPORT INFORMATION

UN number: Not regulated as hazardous material for transportation.

UN proper shipping name: Not regulated as hazardous material for transportation.

Transport hazard class(es): Not regulated as hazardous material for transportation.

Packing group: Not regulated as hazardous material for transportation.

Environmental hazards: Not regulated as hazardous material for transportation.

Special precautions for user: Not regulated as hazardous material for transportation.

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Inventory Status

	Japan ENCS	South Korea KECL	Australia AICS	Canada NDSL	Canada DSL
Phenol					Listed
Crystalline Silica, Quartz					Listed
Formaldehyde					Listed
Epoxy resin					Listed
Fiberglass					Listed

Titanium dioxide					Listed
Calcium carbonate				Listed	
Aluminum Oxide, Non-fibrous	(1) -23	KE-01012	Listed		Listed
Resin					Listed

	TSCA Inventory Status				
Phenol	Listed				
Crystalline Silica, Quartz	Listed				
Formaldehyde	Listed				
Epoxy resin	Listed				
Fiberglass	Listed				
Titanium dioxide	Listed				
Calcium carbonate	Listed				
Aluminum Oxide, Non-fibrous	Listed				
Resin	Listed				

Phenol :

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1261(1374)

Section 302 EHS: EPCRA (SARA Title III) Section 302 (40 CFR Part 355) Extremely Hazardous Substances (EHS) Threshold Planning Quantity (TPQ) in pounds.: 500/10,000 Lbs.

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

Crystalline Silica, Quartz :

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

Formaldehyde :

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.781(918)

CA PROP 65: Listed: cancer.

Section 302 EHS: EPCRA (SARA Title III) Section 302 (40 CFR Part 355) Extremely Hazardous Substances (EHS) Threshold Planning Quantity (TPQ) in pounds.: 500 Lbs.

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

Aluminum Oxide, Non-fibrous :

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

Phenol :

EC Number: 203-632-7

Crystalline Silica, Quartz :

EC Number: 238-878-4

Formaldehyde :

EC Number: 200-001-8

Fiberglass :

EC Number: 266-046-0

Titanium dioxide :

EC Number: 236-675-5

Calcium carbonate :

EC Number: 215-279-6

Aluminum Oxide, Non-fibrous :

EC Number: 215-691-6

State Right To Know

	RI	MN	IL	PA	MA
Phenol				Listed	Listed: Massachusetts Oil and Hazardous List
Crystalline Silica, Quartz				Listed	Listed
Formaldehyde				Listed	Listed: Massachusetts Oil and Hazardous List
Titanium dioxide				Listed	Listed
Calcium carbonate				Listed	Listed
Aluminum Oxide, Non-fibrous	Listed	Listed	No Data	Listed	Listed

	NJ				
Phenol	Listed: NJ Hazardous List; Substance Number: 1487				

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

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard:	1
HMIS Fire Hazard:	1
HMIS Reactivity:	0

Health Hazard	**1**
Fire Hazard	**1**
Reactivity	**0**
Personal Protection	

SDS Creation Date:	August 15, 2009
SDS Revision Date:	March 31, 2015
MSDS Revision Notes:	GHS Update