FLEXOVIT USA INC.

SAFETY DATA SHEET

SECTION 1 - Identification of the Product and Company

1.1 Product Name — Small Diameter Abrasive Wheels (Cutoff, Combination, and Grinding)

1.2 Product Use — Cutting, Notching, and Grinding

1.3 Company Details: **Flexovit Abrasives Inc.**

Address: 1305 Eden-Evans Center Rd.
Angola, NY 14006
Phone: 1-716-549-5100
Fax: 1-716-549-4078

SECTION 2 - Hazard Information

2.1 Precautionary statements

Exposure to grinding dust may aggravate existing respiratory problems.

2.2 Description of Hazards

Dust generated from the intended use of this product may contain trace amounts of inorganic fluorides.
Excessive exposure to fluoride has been shown in NIOSH studies to increase bone density.
Dust generated from the intended use of this product may contain trace levels of phenolic resins
which may under excessive exposure cause skin sensitization and airway obstruction.

SECTION 3 - Composition

Ingredient	Formula	% Weight	OSHA Regulated	Cas #
Aluminum Oxide*		60.0 - 95.0	15mg/M3 !	1344-28-1
Silicon Carbide		55.0 - 95.0	15mg/M3 !	409-21-2
Zirconium Oxide		0.0 - 9.0	5mg/M3 (as Zr)	1314-23-4
Phenol/Formaldehyde Binder **		5.0 - 20.0	None Found	None Found
Fiberglass ^		0.0 - 7.0	15mg/M3	65997-17-3
Graphite		0.0 - 2.0	15mppcf	7782-42-5
Calcium Oxide		0.0 - 3.0	5mg/M3	1305-78-8
Fluorides ~#		1.0 - 15.0	2.5mg/M3 (as F)	Various
Calcium Compounds~		1.0 - 12.0	15mg/M3 !	Various
Sulfates & Sulfides~		0.0 - 15.0	15mg/M3 !	Various
Rubber		0.0 - 2.0	None Found	78-79-5

* Aluminum Oxide is at least 96% pure, usually containing other metallic oxides as impurities.

** Free Phenol [108-95-2](PEL & TLV:5ppm) and free Formaldehyde [50-00-0](PEL:0.75ppm, TLV:1ppm)

^ Present only in fiberglass reinforced wheels.

~ Substance is a compound and/or mixture.

Maximum Fluoride Content as F is 9.05%. Fluoride may be released in trace amounts under normal use.

! As Total Dust, 5mg/M3 respirable fraction.

SECTION 4-First Aid

4.1 First Aid for exposure

Eyes:	Irritant. Treat as a foreign body in the eye. Flush with large amounts of clean water for at least 15 minutes. If irritation persists, obtain medical assistance.
Inhalation:	Classified as a nuisance dust. Remove to fresh air. Provide artificial respiration as needed and obtain medical assistance.
Ingestion:	Obtain medical assistance. Contact poison control center.
Skin:	Wash affected areas with soap and water. Obtain medical assistance if aggravated skin conditions persist.

4.2 Signs and Symptoms of Exposure

Eyes:	Dusts may irritate eyes.
Inhalation:	Dusts may cause irritation to nose, throat or lungs resulting in coughing or shortness of breath. Continued excessive exposure to abrasive grains may affect breathing capacity. Signs of excessive exposure might include deposits of material in the eyes, ears, nasal passages and irritation of the mucous membranes.
Ingestion:	Non-toxic, but ingestion should be avoided.
Skin:	Dust may irritate the skin on some individuals.

SECTION 5 - Fire Fighting Measures

5.1	Means of Extinction:	Water, foam or CO2
5.2	Unusual Fire or Explosion Hazards:	Fumes from burning cured Phenol/Formaldehyde resin may contain trace amounts of formaldehyde which can cause eye, nose and throat irritation. The short term exposure limit for formaldehyde is 2ppm.
	Flammable Properties:	LEL: Not Applicable UEL: Not Applicable
5.3	Special Fire Fighting Procedures:	Toxic fumes are evolved on burning. Breathing apparatus should be worn to fight serious fires in confined spaces.

SECTION 6 - Accidental Release Measures

Collect and pick up materials following normal precautions for inert nuisance dusts.

Disposal by standard landfill methods consistent with applicable federal, state and local laws.

SECTION 7- Storage, Handling and Use Procedures

7.1 Handling: Observe recommended operating speeds. Provide adequate ventilation for nuisance dusts. Also, see ANSI B7.1.

7.2 Storage: Store in a cool, dry place as per ANSI B7.1.

SECTION 8- Personal Protective Control Measures

8.1 Exposure limits

Chemical	OSHA PEL	ACGIH TLV
Aluminum Oxide*	15mg/M3	10mg/M3
Silicon Carbide	15mg/M3	10mg/M3
Zirconium Oxide	5mg/M3 (as Zr)	5mg/M3 (as Zr)
Phenol/Formaldehyde Binder **	None Found	None Found
Fiberglass ^	15mg/M3	10mg/M3
Graphite	15mppcf	2mg/M3 (Dust)
Calcium Oxide	5mg/M3	2mg/M3
Fluorides ~#	2.5mg/M3 (as F)	2.5mg/M3 (as F)
Calcium Compounds~	15mg/M3	10mg/M3
Sulfates & Sulfides~	15mg/M3	10mg/M3
Rubber	None Found	None Found

8.2 Personal protection requirements and referrals

Respiratory: Use an approved respirator when airborne contaminant levels exceed TLVs and PELs as per OSHA 29 CFR 1910.134 or 139 (Respirators), and OSHA 29 CFR 1910.1000 (Air Contaminants).

Ventilation: Good local exhaust is essential for dry grinding operations as per ANSI Z88.2, OSHA 29 CFR 1910.94 (Ventilation).

Protective Gloves: Use Gloves as required. (Arm sleeves or barrier creams may be useful in the prevention of dermatitis).

Eye Protection: Wear eye protection as per ANSIZ87.1 and OSHA 29 CFR 1910.33.

Hearing Protection: Hearing protection may be required as per OSHA 29 CFR 1910.95 (Hearing Protection) during normal use.

Body Protection: Use as required.

Hygienic Practices: Exercise good personal hygiene.

SECTION 9- Physical/Chemical Characteristics

Boiling Point		Specific Gravity	2.0 to 4.0
Vapor Pressure	*(mm Hg.)*	Melting Point	
Vapor Density	*(AIR=1)*	Evaporation Rate (Butyl Acetate=1)	
Solubility in Water	Insoluble to Slight	Appearance	Light or Medium Gray, Brown, Black or Maroon Colored, Porous Soilid.
Lower And Upper Explosion Limits			
Flammable Limits	Not applicable	Odor	No Detectible Odor.
Flash Point	Not applicable	Degradation Temperature	

SECTION 10 - Stability and Reactivity Data

Stability:	Stable.
Hazardous Polymerization:	Will not occur.
Decomposition Products:	During use, dust and decomposing organic fumes are generated which may contain trace amounts of phenol, formaldehyde and fluorides. In most cases, the material removed from the work piece will be significantly greater than the grinding wheel components. Coolants or other surface residues may produce other decomposition products.
Conditions to be Avoided:	No applicable information found.

SECTION 11 - Toxicological Data

11.1 Component information

Chemical	Short term effects	Long term effects	Carcinogen
			None Listed

11.2 Route(s) of Entry and symptoms of exposure

Primary Routes of Entry: Eyes and Inhalation

See section 4.2

Section 12-Ecological Information

N/A

Section 13-Disposal Considerations

N/A

Section 14-Transport Information

N/A

Section 15-Regulatory Information

N/A

Section 16-Other Information

SDS Revision Date:	November 1, 2014
Reason for Update:	Mandated Update
Preparation By:	Laurie Siraguso

COMPANY USE

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