Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Disc Brake Semi-Met (Abex)

Identity (as used on label and list) Friction Material:
NRP(12017EE,12018FF,12022FF,12023EE,12024EE,12027EE,12035EE,12036,12037,
12038EE,12049EE,12050GG,12110EE,12999EE, 12999FF)
NRSP(12005FF,12015EE,12026FF,12044,12063GG,12069EE,12014FF)
NRSS(12012,12029EE,12041FF,12047)
TS(1125FF,1120EE)
NSS(1160EE,1110FF,1105EE,1245)

MANUFACTURER'S NAME: Cooper Industries
Abex Friction Products
2410 Papermill Road, P.O. Box 32250
Winchester, Virginia 22604

SUPPLIER'S NAME: Rayloc
Division of Genuine Parts Company
3100 Windy Hill Road
Atlanta, Georgia 30339

REVISION DATE:
Nov. 1, 2012

Section 2 - HAZARDOUS INGREDIENTS

<table>
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<th>CAS NO.</th>
<th>INGREDIENT</th>
<th>-----EXPOSURE LIMITS-----</th>
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Silica*,Silicates, Tripoli,
   Talc (non fiberous form) 0.1mg/m³ 0.1mg/m³
Carbon Black, Graphite, Others 2.0mg/m³ 2.0mg/m³
Phenolic,Cashew and Elastomeric Compounds 5.0mg/m³ 5.0mg/m³
Wood Flour and Other Fillers 1.0mg/m³ 1.0mg/m³
Metals and their Oxides - Iron,
   Zinc, Aluminum, Magnesium, 10.0mg/m³ 10.0mg/m³
   Brass Chips
Organic and Inorganic (non asbestos) Fibers 1 fiber/cc 1 fiber/cc
Section 3 - HAZARDS IDENTIFICATION

-Health Hazards (Acute and Chronic)

Some persons may be sensitive to cashew resins and develop dermatitis-type problems. Dust of glass fiber, silica, talc, graphite, carbon black and coal can produce pneumoconiosis, silicosis, a progressive degenerative scarring of lung tissue and other lung damage. Metal dusts can be irritants of the eyes and upper respiratory system. There is little evidence of chronic industrial poisoning from iron, aluminum, and zinc dusts.

-Signs and Symptoms of Exposure
Cashew Resins - skin eruptions similar in appearance to poison ivy. Pneumoconiosis and silicosis - coughing, wheezing, shortness of breath, sputum production, impaired pulmonary function. Dusts in eye may cause irritation. Gastrointestinal disturbances possible from ingestion. Glass fiber may create transient mechanical irritation of the skin of some persons.

-Other Precautions
Pre-employment screening for allergies and histories of skin sensitivities may be beneficial in determining person sensitive to cashew materials.

-Routes of Entry
Inhalation: Yes          Skin: Yes          Ingestion: Yes

-Carcinogenicity
NTP: No      IARC Monographs: Yes*      OSHA Regulated: No
*IARC has concluded, volume 42, 1987, that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals and "limit evidence" with respect to human.

-Medical Conditions generally aggravated by exposure
Existing respiratory problems may be aggravated by exposure to any dust.

Section 4 - FIRST AID MEASURES

-Emergency and First Aid Procedures
Eye Contact: Flush eyes with large amounts of water for 15 minutes with eye lids open, get medical attention.
Skin Contact: Wash affected area thoroughly with soap and water, launder contaminated clothing before reuse. If irritation persists, get medical attention.
Inhalation: Remove from exposure to fresh air, restore breathing, get medical attention.

Ingestion: Give large quantities of water and induce vomiting, get medical attention. Do not make an unconscious person vomit.

Section 5 - FIREFIGHTING MEASURES

Flash Point: Not Available
Flammable Limits: Not Available  LEL: Not Available  UEL: Not Available

Extinguishing Media: Water (class A, B, or C)

Special Firefighting Procedures: Positive pressure self-contained breathing apparatus should be used, personnel not having suitable respiratory protection should leave the area to prevent significant exposure to toxic combustion gases from any source.

Unusual Fire and Explosion Hazards: Powder will smolder and burn.

Section 6 - ENVIRONMENTAL RELEASE MEASURES

-Steps to be taken in case material is released or spilled

Grinding, drilling, milling, etc. can result in the release of airborne
dust. Wet sweep or vacuum, avoid generating airborne dust and avoid breathing dust. Measures as outlined in Section 8 should be followed if this occurs.

Section 7 - HANDLING AND STORAGE

Information Not Available

Section 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH approved for pneumoconiosis-fibrosis producing dusts and dusts with TLV not less than 0.05mg/m³.

Ventilation: Local Exhaust - For dust exposures exceeding TLV.
Mechanical (general) - Not recommended for dust exposures.
Special - None known
Other - Barrier creams for persons with skin sensitive to cashew resins and fiber glass.

Protective Gloves: Recommended.

Eye Protection: Should not be needed for normal handling of product. Eye protection is good practice where dust is propelled by grinding or drilling activities.

Other Protective Clothing or Equipment: Long sleeved shirts or other protective clothing may be beneficial to prevent skin contact of persons sensitive to cashew resins and fiber glass.

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Section 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION (cont.)

Work/Hygienic Practices: Employees should be properly instructed in the use of control measures as indicated above when there is a need for it. If dust from this product is produced, unnecessary exposures should be avoided by using a vacuum in place of dry brooming. Use wet method of cleaning for other surfaces. Proper and adequate personal hygiene should be practiced by exposed workers.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Not Available Specific Gravity (H₂O=1): 2.5-4.0
Vapor Pressure (mmHg): Not Available Melting Point: Not Available
Vapor Density (air=1): Not Available  Evaporation Rate: 0  (butyl acetate=1)
Solubility in Water: Insoluble
Appearance and Odor: Solid, brownish grey color, friction material odor

Section 10 - STABILITY AND REACTIVITY
Stability: Stable
Conditions to Avoid: None Known
Incompatibility (materials to avoid): None Known
Hazardous Decomposition or By Products: Incomplete combustion will create carbon monoxide and dioxide.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: None Known

Section 11 - TOXICOLOGICAL INFORMATION
Information Not Available

Section 12 - ECOLOGICAL INFORMATION
Information Not Available

Section 13 - DISPOSAL CONSIDERATIONS
-Waste Disposal Method
Hazardous ingredients: 40 CFR, Part 261, 262 and applicable state and local regulations.

Section 14 - TRANSPORT INFORMATION
Information Not Available

Section 15 - REGULATORY INFORMATION
Information Not Available

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