

MATERIAL SAFETY DATA SHEET

Blocks



Revision: 02 - Date Prepared : September 17th, 2002 - Page : 1 / 3

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

The product identified on this page is a resin bonded product, and meets the OSHA definition of an article and is exempt from the Hazard Communication Standard, when used as intended. Some potential may exist when exposure to dust when grinding, drilling, milling, etc, occurs and all information contained herein should be adhered to.

The ingredients listed in this data sheet are contained in the product identified. Exact formulations are considered proprietary and confidential and as such precise product information will not be disclosed, other than to a health professional in accordance with the regulations, without an approved Secrecy Agreement.

The information provided is believed to be accurate, however TMD Friction do Brasil S.A. makes no warranty as to its accuracy. Further this data is provided free of charge and is not part of any contract or sale.

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PRODUCT IDENTIFICATION (as used on label and List)

DM334, DM334FF, NABK090, NABK090FF, NABK100FF, NABK102/FF, NABK110/FF, NABK130, NABK132, NABK132FF, NABK132GG, PA141, NABK141GG, NABK142, NABK143, NABK145, NABK156, NABK156/A, NABK170, NABK170FF, NABK174, NABK175, NABK200, NABK450, DON340, DON8100.

SECTION I

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SECTION II

Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV
Glass Fiber	10.0 mg/m3	10.0 mg/m3
Silica, Silicates, Tripoli, Talc(Non fiberous form)	0.1 mg/m3	0.1 mg/m3
Carbon products, Carbon black, Graphite, Others	2.0 mg/m3	2.0 mg/m3
Phenolic, cashew and Elastomer Compounds	5.0 mg/m3	5.0 mg/m3
Wood Flour and Other Fillers	1.0 mg/m3	1.0 mg/m3
Metals and their Oxides:Iron, Zinc, Aluminium, Brass,	10.0 mg/m3	10.0 mg/m3

MATERIAL SAFETY DATA SHEET

Blocks



Revision: 02 - Date Prepared : September 17th, 2002 - Page : 2 / 3

SECTION III

Physical / Chemical Characteristics

Boiling Point	NA	Specific Gravity (H2O-1)	1.5 - 3.5
Vapor Pressure (mm Hg)	NA	Melting Point	NA
Vapor Density (Air -1)	NA	Evaporation Rate (Butyl Acetate -1)	0
Solubility in Water	No	Appearance and Odor	Dark Grey Color, Friction Material Odor, Dust

SECTION IV

Fire and Explosion Hazard Data

Flash Point	NA	Flamable Limits	NA	LEL	UEL
Extinguishing Media	Water, (Class A, B or C)				
Special Fire Fighting Procedures	NK				
Unusual Fire and Explosion Hazards	NK				

SECTION V

Reactivity Data

Stability	Unstable		Conditions to avoid	NK
	Stable	X		
Incompatibility (Materials to Avoid)		NK		
Hazardous Decomposition or Byproducts:		Incomplete combustion will create carbon monoxide and dioxide, possibility of Phenolic derivatives and Formaldehyde		
Hazardous	May occur		Conditions to avoid	NK
Polymerization	Will not occur	X		

SECTION VI

Health Hazard Data

Route (s) of Entry	Inhalation: YES	Skin: YES	Ingestion: YES
Health Hazards (Acute & 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 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, aluminium, and zinc dusts.			
Carcinogenicity:	NTP	IARC Monographs	OSHA Regulated
No	No	No	No
Signs and Symptoms of Exposure: Cashew Resins - Skin eruptions similar in appearance to poison ivy. Pneumoconiosis - coughing, wheezing, shortness of breath, impaired pulmonary function. Dust in eye may cause irritation. Gastrointestinal disturbances possible from ingestion. Gass Fiber may create transient mechanical irritation of the skin of some persons.			
Medical Conditions generally aggravated by exposure			NK
Emergency and First Aid Procedure: Should not be necessary from reasonable handling of this product.			

MATERIAL SAFETY DATA SHEET
Blocks



Revision: 02 - Date Prepared : September 17th, 2002 - Page : 3 / 3

SECTION VII

Precautions for Safe Handling and Use

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

Grinding, drilling, milling, etc, can result in the release of airborne dust. Measures as outlined in Section VIII should be followed if this occurs.

Waste Disposal Method:

Hazardous ingredients: 40 CFR, Part 261, 262 and applicable State and Local regulations.

Other Precautions:

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

SECTION VIII

Control Measures

Respiratory Protection (Specific Type):

NIOSH approved for pneumoconiosis – fibrosis producing dusts and dusts with TLV not less than 0.05 mg/m³

Ventilation	Local Exhaustion: For dust exposures exceeding TLV
	Mechanical (General): Not recommended for dust exposures
	Special: NK
	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 sleeves shirts or other protective clothing may be beneficial to prevent skin contact of persons sensitive to cashew resins and fiber glass.

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.

NA - Not Available

NK - Not Known