

**MATERIAL SAFETY DATA SHEET****Date of Issue:** May/2004**According to ISO 11014-1****Issue:** 1st**MSDS – PD972 (FLE972)****Last Update Date:** May/2004**SECTION 01 – PRODUCT AND COMPANY IDENTIFICATION**IDENTITY: Disc Brake Pads – **PD972 (FLE972)**

Chemical Family Name: Non Asbestos Friction Material

Use for the product: In Brake Application

Manufacturer's Name: FRAS-LE S.A

Address: RS 122 – Km 66 – nº 10945 – Bairro Forqueta – Caxias do Sul – 95010.550 – RS –Brasil

Telephone Number for Information: (54) 209-1955 - Fax (54) 209-2021 - silaq@fras-le.com.br

SECTION 02 – INGREDIENTS AND HAZARDOUS

Hazardous Components	ACGIH TLV-TWA *
Metallic Fiber	NA
Organic Fiber	10mg/m ³
Coke, Graphite	2mg/m ³
Rubber	NA
Phenolic Resin	5mg/m ³
Metallic Oxides	2mg/m ³
Metallic Powders	1mg/m ³
Metal Sulphides	0,2mg/m ³
Non Fibrous Silicates	3mg/m ³
Other Fillers	2,5mg/m ³

Note: This is an asbestos free product and doesn't contain lead, cadmium, chromium VI.

SECTION 03 – HAZARDS IDENTIFICATION

Route(s) of Entry: Inhalation: yes Skin: yes Ingestion: no

Health Hazards (Acute and Chronic):

Some persons may be sensitive to phenolic resins and develop dermatitis-type problems. Overexposure of dust of silica, graphite, and coke can produce lung damage. Metal dusts can be irritant to eyes and upper respiratory system.

SECTION 04 – FIRST-AID MEASURES

Emergency and First Aid Procedures:

Should not be necessary from reasonable handling of this product.

SECTION 05 – FIRE-FIGHTING MEASURES

Flash Point : NA

Flammable Limits : NA

Extinguishing Media: water fog, CO2 foam as appropriate for surrounding materials.

Special Fire Fighting Producers :

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.

SECTION 06 – ACCIDENTAL RELEASE MEASURES

Spill and leak procedures : NA

SECTION 07 – HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Sparks may be produced under some grinding conditions. Grinding, drilling, milling, can result in the release of airborne dust. Use vacuum to avoid dust dispersal.

Storage in dry place. Avoid wet or damp storage that could produce rust on friction surface.

Hazards polymerization: will not occur Condition to avoid : NK

Hazardous Decomposition Products: incomplete combustion will create carbon monoxide and dioxide

SECTION 13 – DISPOSAL CONSIDERATION

Waste Disposal:

Scrap pieces should be disposed of in a way to prevent airborne dust.

Wastes should be placed in sealed container marked with appropriate warning label.

Check local, state and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

Shipping name: Non – regulated material according to 49 CRF 172. 101 part 171

Hazard Class: Not sublet to DOT Hazardous Material Registry.

SECTION 16 – OTHER INFORMATION

Maintain good housekeeping practices.

Employees should be properly instructed of control measures as indicated above when there is a need for it. The amount of dust produced should be controled, being necessary the use of vacuum cleaning.

* ACGIH TLV-TWA - American Conference of Governmental Industrial Hygienists - 2000 Edition

NA – Not Available

NK – Not Known

Prepared: Research Chemist

Approved: Research and Development Manager

