



**MATERIAL SAFETY DATA SHEET**  
**NITRILE POWDER RUBBER**  
**NP-6221G**

PRESENT ISSUE: 04/09/07  
REVISION: 00

**SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION**

- COMMERCIAL NAME: NP-6221G
- CHEMICAL NAME/SYNONYM: Acrylonitrile - Butadiene Copolymer
- CAS NUMBER: 9003-18-3
- CAS NAME: 2-Propenenitrile polymer with 1,3-Butadiene
- ADDRESS: Rua Marumbi, 1300
- CEP: 25221-000 – Duque de Caixas – RJ
- **EMERGENCY TELEPHONE:** (+55-21) 2776-3228 / 2128-3423
- FAX FOR INFORMATION: (+55-21) 2776-3345

**SECTION 2 – COMPOSITION AND INFORMATION ON INGREDIENTS**  
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Hazardous Ingredients	CAS #	Amount	Exposure Limits	
			OSHA PEL	ACGIH TLV
Acrylonitrile	000107-13-1	< 10 ppm	2 ppm TWA	2 ppm TWA
			1 ppm AL	A2, Skin
			10 ppm Ceiling	
Butadiene	000106-99-0	< 0,2 ppm	1 ppm TWA	2 ppm TWA
			5 ppm STEL	A2
			0,5 ppm AL	
Others Ingredients	CAS #	Amount		
Acrylonitrile / Butadiene Copolymer	9003-18-3	~ 94%		
Talc		~ 6%		

**SECTION 3 - HAZARDS IDENTIFICATION**

- SPECIFIC HAZARD: No acute hazards or effects are known.



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- **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Some individuals with specific sensitivities may exhibit eye, nose, throat or thermal irritation with prolonged exposure to processing fumes and vapors.

- **ROUTES OF EXPOSURE:**

**Eye Contact:** not a probable source of exposure. Particulates may scratch eye surface or cause irritation.

**Skin Contact:** a single prolonged exposure is not likely to result in material being absorbed through the skin in a harmful amount. Repeated to hot material may cause thermal burns.

**Ingestion:** not a probable source of exposure.

**Inhalation:** not a probable source of exposure under conditions of normal use. Hot fumes or vapors that may form during processing can cause irritation to the respiratory tract.

- **EFFECTS OF OVEREXPOSURE:** Not detected. These materials are high molecular weight polymers.

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#### SECTION 4 – FIRST AID MEASURES

- **SKIN CONTACT:** Wash with soap and water. If thermal irritation, flush affected area with cold water to dissipate heat, then cover with clean cotton sheeting or gauze and get prompt medical attention.
- **EYE CONTACT:** Remove as for any foreign object. Flush with clean water for 15 minutes. Obtain medical attention if irritation persists.
- **INHALATION:** If fumes or vapors are inhaled, move to fresh air, aid breathing. Obtain medical attention if irritation persists.
- **INGESTION:** Unlikely to occur.

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#### SECTION 5 – FIRE-FIGHTING MEASURES

- **FLASH POINT METHOD:** Not applicable.
- **AUTO IGNITION TEMPERATURE:** At temperatures above 373 °C (700 °F).
- **IGNITION TEMPERATURE:** 300 °C (572 °F).
- **COMBUSTIBLE:** Yes, with the presence of an ignition source.
- **UPPER/LOWER FLAMMABLE LIMITS:** Not Established.
- **HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, products from incomplete combustion, nitrogen oxides, acrid fumes and toxic gases.
- **EXTINGUISHING MEDIA:** Water, foam, chemical power and CO<sub>2</sub>



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- **SPECIAL FIRE FIGHTING PROCEDURE:** During emergency conditions exposure to thermal decomposition products may cause a health hazard. Use of NIOSH approved self contained breathing apparatus is recommended.

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#### SECTION 6 – ACCIDENTAL RELEASE MEASURES

- **SPILL AND RELEASE INFORMATION:** Repackage uncontaminated rubber. Reuse or dispose of as Section 13 if contaminated.

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#### SECTION 7 - HANDLING AND STORAGE

- **HANDLING PROCEDURES AND EQUIPMENT:** Avoid skin and eye contact, practice good personal hygiene. Avoid inhalation of fumes or vapors from hot rubbers, compounds and vulcanizates.
- **ENGINEERING CONTROLS:** Local exhaust ventilation is recommended during all hot processing operations.
- **STORAGE:** At ambient temperatures, keep away from heat and open flame source, in a dry covered area; static electricity may cause an explosion.

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#### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

- **PERSONAL PROTECTIVE EQUIPMENT:**
  - Eye:** wear safety goggles.
  - Skin:** wear clothing appropriate to prevent skin contact. Where contact may occur with hot material, wear thermal resistant gloves, arm protection and a face shield.
  - Respiratory:** not normally required at ambient temperatures. If processing in area where ventilation is inadequate, wear a NIOSH approved organic vapor respirator with mechanical filtration.

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#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- **PHYSICAL STATE:** Granule
- **APPEARANCE:** White to yellowish granule
- **ODOR:** Characteristic
- **ODOR THRESHOLD:** Not Established
- **MELTING/FREEZING POINTS:** Not applicable



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- SPECIFIC GRAVITY: 1.04
- BOILING POINT: Not applicable
- VAPOR PRESSURE: Not applicable
- VAPOR DENSITY: Not applicable
- VOLATILES (% by volume): 0.7 max.
- WATER: SOLUBILITY: Insoluble
- COEFFICIENT IN WATER/OIL DISTRIBUTION: Not Established
- pH: Not applicable
- EVAPORATION RATE: Not applicable

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#### SECTION 10 – STABILITY AND REACTIVITY

- CHEMICAL STABILITY: Stable at ambient temperature and pressure.
- CONDITIONS TO AVOID: Ignition source. Product is combustible.
- INCOMPATIBILITY WITH OTHER MATERIALS: None known.
- HAZARDOUS DECOMPOSITION PRODUCTS: In combustion case, it emits toxic fumes of carbonic oxides and nitrogen and HCN.
- HAZARDOUS POLYMERIZATION: Will not occur.

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#### SECTION 11 - TOXICOLOGICAL INFORMATION

LD50=Not Established LC50=Not Applicable.

**Reproductive Effects:** none reported.

**Teratogenicity:** none reported.

**Mutagenicity:** none reported.

**Carcinogenicity:** none reported.

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#### SECTION 12 - ECOLOGICAL INFORMATION

- Avoid to spread these products in the environment. They are not biodegradable, but they are recyclable. No effects are expected if dust concentrations are maintained below the Occupational Exposure Standard. No carcinogenic or genotoxic effects are known.

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#### SECTION 13 – DISPOSAL CONSIDERATIONS

- DISPOSAL INFORMATION: Reuse if possible. Dispose in accordance with local, state and federal regulations and applicable environmental regulations. Material as supplied is not characterized as hazardous under RCRA.



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#### SECTION 14 – TRANSPORTATION INFORMATION

- These products are not classified as dangerous for transportation.

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#### SECTION 15 - REGULATORY INFORMATION

- These products are not classified as dangerous to supply.
- **OSHA** These products are not hazardous under Hazard Communication Standard 29 CFR Part 1910.1200.
- **TSCA** Components of these products are listed under TSCA Chemical Substances Inventory.
- **DOT** **United States:** Designation and labeling not applicable as product is not defined or designated as a hazardous material by U.S. Department of Transportation under Title 40 of CFR.  
**Canada:** Not regulated under the Canadian Transportation of Dangerous Goods Regulations.
- **SARA Title III** **Section 302/304:** Extremely Hazardous Substances - None.  
**Section 311:** These products are not subjected to reporting requirements.
- **WHMIS** Components in these products are not listed in Canada's Workplace Hazardous Material Information System.
- **EEC** These products are not considered hazardous by the European Economic Community.

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#### SECTION 16 - ADDITIONAL INFORMATION

##### • ABBREVIATIONS:

- AL Action Level
- TWA Time Weighted Average
- Skin Skin contact may be a significant route of exposure
- STEL Short Term Exposure Limit
- A2 Suspected Human Carcinogen
- CAS Chemical Abstract Service
- NIOSH National Institute for Occupational Safety and Health



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- LD50 The dose that causes death in 50% of the animals exposed
- LC50 The Concentration in air that causes death in 50% of the animals exposed
- RCRA Resource and Conservation Recovery Act
- OSHA Occupational Safety and Health Administration
- TSCA Toxic Substance Control Act
- DOT Department of Transportation
- SARA Superfund Amendments and Reauthorization Act
- WHMIS Workplace Hazardous Material Information System
- EEC European Economic Community
- CFR Code of Federal Regulations

Although the information contained in this MSDS is believed to be correct as of the date hereof, NITRIFLEX makes no representations as to the completeness or accuracy thereof. Those who utilize the product described herein are responsible for determining the suitability of the product for the intended use and the appropriate manner of processing the product to ensure safety and quality. In no event will NITRIFLEX be responsible for damages of any nature resulting from the use of or reliance upon the information contained herein.