



NITRIFLEX

## MATERIAL SAFETY DATA SHEET

### “CLEAN” CARBOXILATED NITRILE RUBBER

### NITRICLEAN-3450 X.1

DATE: 07/30/07  
REVISION: 00

#### SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

- COMMERCIAL NAME: **NITRICLEAN-3450 X.1**
- CHEMICAL NAME/SYNONYM: Acrylonitrile, Butadiene, Methacrylic Acid Terpolymer
- CAS NUMBER: 9010-81-5
- CAS NAME: 2-Propenenitrile polymer, Methacrylic acid with 1,3-Butadiene
- COMPANY: NITRIFLEX S A INDÚSTRIA E COMÉRCIO
- ADDRESS: Rua Marumbi, 1300
- 25221-000, Campos Elíseos – Duque de Caxias - RJ
- EMERGENCY TELEPHONE : (+55-21) 2776-3228 / 2128-3423
- TELEFAX FOR INFORMATION: (+55-21) 2776-3345

#### SECTION 2 – COMPOSITION AND INFORMATIONS ON INGREDIENTS

##### NITRICLEAN-3450 X.1

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/ Methacrylic Acid Polymer	9010-81-5	~ 100%		



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**SECTION 3 – HAZARDS IDENTIFICATION**

- **SPECIFIC HAZARD:** No acute hazards or effects are known.
  - **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Processing operations may produce vapours and dust that may cause eye, skin, and respiratory tract irritations.
  - **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 vapours, which may form during processing, can cause irritation to the respiratory tract.
- EFFECTS OF OVEREXPOSURE:** No adverse health effects are expected during normal processing when potential exposures are eliminated by good industrial hygiene practice and well ventilated conditions.

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**SECTION 4 - FIRST AID MEASURES**

- **SKIN CONTACT:** Remove contaminated clothing. Wash contact area with soap and water for 15 minutes.
- **EYE CONTACT:** Treat as any foreign particulate matter. Flush eyes with running water for several minutes while holding eyelids open. Consult a physician if irritation persists.
- **INHALATION:** Remove the affected individual to fresh air. If breathing has stopped, get artificial respiration and seek medical assistance immediately.
- **INGESTION:** Unlikely to occur.

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**SECTION 5 – FIRE-FIGHTING MEASURES**



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- 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, acidic fumes and toxic gases.
- EXTINGUISHING MEDIA: All fire extinguishing media permitted - water recommended and carbon dioxide not recommended.
- 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.
- UPPER/LOWER EXPLOSIVE LEVEL: Not applicable.
- SENSITIVITY TO IMPACT/SHOCK: Not applicable.
- SENSITIVITY TO STATIC DISCHARGE: Not applicable.

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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 vapours from hot rubbers, compounds and vulcanizates.
- ENGINEERING CONTROLS: Local exhaust ventilation is recommended during all hot processing operations.
- STORAGE: At room temperatures, keep away from heat and open flame source, in a dry covered area.

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



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• PERSONAL PROTECTIVE EQUIPMENT:

**Eye:** wear safety glasses.

**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 vapour respirator with mechanical filtration.

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#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- PHYSICAL STATE: Solid, bale
- APPEARANCE: White to yellowish
- ODOUR: Characteristic
- ODOUR THRESHOLD: Not established
- MELTING/FREEZING POINTS: Not applicable
- SPECIFIC GRAVITY: 0.98
- BOILING POINT: Not applicable
- VAPOUR PRESSURE: Not applicable
- VAPOUR DENSITY: Not applicable
- VOLATILES (% by weight@100°C): 1.0 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 room temperature and pressure.
- CONDITIONS TO AVOID: Ignition source. Product is combustible.
- INCOMPATIBILITY WITH OTHER MATERIALS: None known.
- HAZARDOUS DECOMPOSITION PRODUCTS: Combustion products will be carbon monoxide, carbon dioxide, nitrogen oxides, acidic fumes and products from incomplete combustion.



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- HAZARDOUS POLYMERIZATION: Will not occur.

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

TOXICOLOGY 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 spreading this product in the environment. It is not biodegradable, but it is recycable.

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**SECTION 13 – DISPOSAL CONSIDERATIONS**

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

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**SECTION 14 - TRANSPORTATION INFORMATION**

- This product is not classified as dangerous for transportation.

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**SECTION 15 - REGULATORY INFORMATION**

- This product is not classified as dangerous to supply.
- **OSHA**                      This product is not hazardous under Hazard Communication Standard 29 CFR Part 1910.1200.



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- **TSCA** Component of this product is listed under TSCA Chemical Substances Inventory.
- **DOT** **United States** Designation and labelling 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:** This product is not subjected to reporting requirements.
- **WHMIS** Component in this product is not listed in Canada's Workplace Hazardous Material Information System.
- **EEC** This product is not considered hazardous by the European Economic Community.

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## SECTION 16 – OTHER INFORMATION / ADDITIONAL COMMENTS

### • ABBREVIATIONS:

- AL Action Level
- A2 Suspected Human Carcinogen
- CAS Chemical Abstract Service
- LC50 The Concentration in air that causes death in 50% of the animals exposed
- LD50 The dose that causes death in 50% of the animals exposed
- NIOSH National Institute for Occupational Safety and Health
- 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



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- TLV                      Threshold Limit Value
- TWA                     Time Weighted Average
- Skin                     Skin contact may be a significant rout of exposure
- STEL                    Short Term Exposure Limit

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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 utilise 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.