

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 1 /11

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**1- IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND COMPANY/  
UNDERTAKING**

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Identification of the substance:

Product name:	<b>NP-2021</b>
Company/undertaking identification:	NITRIFLEX S.A. INDÚSTRIA E COMÉRCIO
Address:	1300, Marumbi Duque de Caxias, RJ 25250-000 - Brazil
Telephone number:	(55 21) 2776-3228 / 2128-3423
Emergency telephone:	(55 21) 2776-3228 / 2128-3423

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**2- HAZARDS IDENTIFICATION**

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Most important hazards: Not hazardous under normal conditions of storage and handling.

**Product effects**

Adverse effects to the human health: May cause skin and respiratory tract irritation.

Environmental effects: It is not expected that this product presents impact to the environment.

Physical and chemical hazards: Not classified for physical and chemical hazards.

Classification of the substance or mixture: Not classified as hazardous.

**Label elements according to Regulation 1272:2008 (GHS)**

Symbol: Not applicable.

Signal word: Not applicable.

Hazard Statement: Not applicable.

Precaution Statement: Not applicable.

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 2 /11

**Label elements according to Directive 67/548/EEC**

Symbol: Not applicable.  
Risk Phrases: Not classified.  
Safety Phrases: Not applicable.

**3- COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical name: Acrylonitrile-butadiene copolymer.  
Synonyms: 1,3-Butadiene, polymer with 2-propenenitrile  
CAS n°: 9003-18-3  
EC n°: Not listed.

**4- FIRST-AID MEASURES**

Inhalation: Remove to fresh air and keep at rest. Seek medical attention. Take this SDS.

Ingestion: Rinse mouth of victim with plenty of water. Induce vomiting. Seek medical attention. Take this SDS.

Skin contact: Remove contaminated clothing and shoes. Wash with plenty of soap and water. Seek medical attention. Take this SDS.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention. Take this SDS.

Most important symptoms and effects, both acute and delayed: May cause respiratory tract irritation with cough and pain. May cause nausea, vomiting and diarrhea. May cause skin irritation with redness and pain. May cause eye irritation with redness, tearing and pain.

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 3 /11

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Indication of any immediate medical attention and special treatment needed:	Avoid contact with this product while helping the victim, keep the victim warmed. Never give anything by mouth to an unconscious person. Symptomatic treatment should include, above all, measured of support as correction of hydro electrolytic and metabolic disturbances and respiratory failure.
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**5- FIREFIGHTING MEASURES**

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Fire Extinguishing Media:	Product is not inflammable, compatible with all extinguishing media, such as dry chemical, water spray, carbon dioxide.
Special hazards arising from the substance or mixture:	May produce carbon monoxide, carbon dioxide, products from incomplete combustion, nitrogen oxides, acrid fumes and toxic gases if burning.
Advice for firefighters:	Self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing.

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**6- ACCIDENTAL RELEASE MEASURES**

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Personal precautions, protective equipment and emergency procedures

Control of dust:	Apply exhaust ventilation system, fog or other appropriate procedure.
Removal of ignition sources:	Ignition sources should be removed preventively.
Provision of sufficient ventilation:	Use in a well ventilated area or with exhaustion system adequate to eliminate gases and vapors.
Prevention of inhalation and skin, mucous membranes and eyes contact:	Do not touch damage containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation, eye and skin contact. Use appropriate personal protective equipment as indicated in – Section 8.
Environmental precautions:	Do not let this chemical enter the environment (soil, waterways and groundwater).

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 4 /11

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Methods and material for containment and cleaning up:	Remove the product using vacuum systems or other method that does not generate dust. Put material in suitable containers and remove them to safe place. Reuse or provide under section 13 in case of contamination. Wash the place where the product was poured large amounts of water.
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**7- HANDLING AND STORAGE**

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Precautions for safe handling:	Avoid contact with skin, eyes and clothing. Avoid inhalation of fumes or vapors from hot rubbers. Ignition sources should be removed preventively. Do not handle near incompatible materials. Use proper personal protective equipment as indicated in Section 8.
Hygiene advice:	Do not eat, drink or smoke when using this product. Wash hands before eating, drinking, smoking or going to the toilet. Take off all contaminated clothing and wash before reuse.
Conditions for safe storage, including any incompatibilities:	Keep only in original container, in a cool, dry, well ventilated place, far from heat and ignition sources. Keep away from food. Keep container tightly closed. Keep out of reach of children.
Packaging materials:	Boxes with an internal protection of polyethylene.

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**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 5 /11

**8- EXPOSURE CONTROLS/PERSONAL PROTECTION****Specific control parameters**

Occupational exposure limits:

	<b>Butadiene (ppm)</b>	<b>Acrylonitrile (ppm)</b>	<b>Calcium carbonate (mg/m<sup>3</sup>)</b>
<b>TLV-TWA</b> (ACGIH, 2010)	2	2	NE
<b>TLV-STEL</b> (ACGIH, 2010)	NE	NE	NE
<b>REL-TWA</b> (NIOSH, 2010)	NE	1	10 (total) / 5 (resp.)
<b>REL-ST</b> (NIOSH, 2010)	NE	NE	NE
<b>REL- C</b> (NIOSH, 2010)	NE	10	NE
<b>IDLH</b> (NIOSH, 2010)	NE	85	NE
<b>PEL-TWA</b> (OSHA, 2010)	1	2	15 (total) / 5 (resp.)
<b>PEL - ST</b> (OSHA, 2010)	5	NE	NE
<b>PEL - C</b> (OSHA, 2010)	NE	10	NE

NE: Not established.

**Appropriate engineering controls:** Provide mechanical ventilation or direct exhaustion to the external media. It is recommended safety shower and eye bath available near work site. The engineering controls measures are the most effective to reduce exposure to the product.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:** Safety wide vision goggles. Avoid wearing contact lenses while using this product.

**Skin and hand protection:** Natural rubber clothing, boots and gloves.

**Respiratory protection:** Respiratory protection equipment, only if the inhalation of this product becomes possible by some procedure. Semi-facial mask with air filter against gases and autonomic air mask at emergency situations.

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 6 /11

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Thermal hazard:	Complete air-ventilated suit, with air supply, or any thermo-resistant clothing available.
Environmental exposure controls:	Do not discharge directly into the environment or into the sewer system. The dilution water from fire fighting can cause pollution.

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**9- PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance:	Powder.
Odor:	Characteristic.
Odor threshold:	Not established.
pH:	Not applicable.
Melting point/freezing point:	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flashpoint:	Not applicable.
Evaporation Rate	Not applicable.
Flammability:	Not applicable.
Upper/lower flammability or explosive limits:	Not established.
Vapour density (Air=1):	Not applicable.
Vapour Pressure (mm Hg):	Not applicable.
Relative density:	~ 0,98
Solubility:	Insoluble.
Partition coefficient: n-octanol/water:	Not applicable.
Auto-ignition temperature:	> 373°C (703,4°F)
Decomposition temperature:	Not established.

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

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Commission Regulation (EU) N° 453/2010*

Pages: 7 /11

Explosive properties: Not applicable.  
Oxidizing properties: No oxidizing properties.

**10- STABILITY AND REACTIVITY**

Chemical stability: Stable under normal conditions of storage and handling. Polymerization will not occur. It's not sensible to mechanical impacts.

Possibility of hazardous reactions: There are not known hazardous reactions with the product.

Incompatible materials: There are not known products or incompatible materials.

Conditions to avoid: High temperatures. Ignition sources.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, products from incomplete combustion, nitrogen oxides, acrid fumes and toxic gases.

**11- TOXICOLOGICAL INFORMATION**

Acute toxicity: Not hazardous under normal conditions of handling. The ingredients that contribute to the hazard are incorporated to the product so that exposure is not expected. Avoid inhalation of fumes or vapors from hot rubbers.

Skin corrosion/irritation: Contact with dust may cause irritation with redness, itching and dryness. May cause dermatitis after repeated and prolonged contact with skin.

Serious eye damage/irritation: Contact with dust may cause irritation of eyes with redness and itching. May cause conjunctivitis.

Respiratory or skin sensitization: It's not expected any sensitization.

Germ cell mutagenicity: There is no relevant data of germ cell mutagenicity.

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 8 /11

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Carcinogenicity:	<p>This product it is not listed as carcinogenic to humans (IARC, ACGIH, NIOSH).</p> <p>The ingredients that contribute to the hazard are incorporated to the product so that exposure is not expected.</p> <ul style="list-style-type: none"><li>- <u>1,3 butadiene</u>: is probably carcinogenic to humans (IARC - 2A), there is evidences that increased risk of leukaemia and lymphoma.</li><li>- <u>Acrylonitrile</u>: is possibly carcinogenic to humans (IARC - 2B), there is evidences that increased risk of lung cancer.</li></ul>
Reproductive toxicity:	There is no relevant data of reproductive toxicity.
STOT – single exposure:	Inhalation of fine particles of the product causes irritation to the respiratory tract with coughing, sneezing, sore throat, shortness of breath and dyspnea. May cause pneumocose and changes in pulmonary function. Overexposure to the residual monomer vapors may cause respiratory tract irritation with cough and central nervous system depression with headache, dizziness, confusion and drowsiness.
STOT – repeated exposure:	Repeated exposure to hot fumes or vapors which may form during processing can cause irritation to the respiratory tract.
Aspiration hazard:	There is no relevant data of aspiration hazard.

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**12- ECOLOGICAL INFORMATION**

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Toxicity:	Not classified as hazardous for aquatic life.
Persistence and degradability:	It's expected high persistence and low degradability.
Bioaccumulative potential:	It's expected low bioaccumulative potential in aquatic organisms.
Mobility in soil:	It's expected low mobility in soil.
Results of PBT and vPvB assessment:	Not available.

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**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 9 /11

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**13- DISPOSAL CONSIDERATION**

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Product:	The treatment and disposal should be evaluated specifically for each product. Can be deposited in landfills, sent to an appropriate incineration or other means of disposal provided they meet the requirements of local law. Recycling can be applied provided they obey the relevant laws.
Product waste:	Keep the product remains in their original containers and properly sealed. Disposal should be performed as established for the product.
Contaminated packaging:	Do not reuse empty containers. These may contain residues of the product and must be kept closed and sent for destruction in the appropriate place. In some cases the packaging should be returned to the registering company or supplier. Recycling can be applied provided they obey the relevant laws.

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**14- TRANSPORT INFORMATION**

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National and international regulations

Land (Road/rail):	UN – “United Nations” Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model Regulations, 16th Edition, 2009.
Waterways (sea/inland):	IMO - “International Maritime Organization” International Maritime Dangerous Goods Code (IMDG Code) - Incorporating Amendment 34-08; 2008 Edition.
Air:	IATA - “International Air Transport Association” Dangerous Goods Regulation (DGR) - 51th Edition, 2010.
UN number:	Not classified as hazardous for transport.
UN proper shipping name:	Not applicable.
Transport hazard class:	Not applicable.

**SDS - SAFETY DATA SHEET****NP-2021**

NBR rubber powder

*In compliance with REACH  
Commission Regulation (EU) N° 453/2010*

Pages: 10 /11

Packing group: Not applicable.

Environmental hazards: Not hazardous.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: It's not listed.

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**15- REGULATORY INFORMATION**

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Regulation 1272:2008: GHS, United Nations, 3th Revised Edition, 2009

ECB: Directives 67/548 e 1999/45

UN Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model Regulations, 16th Edition, 2009

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**16- OTHER INFORMATION**

The NITRIFLEX warns that the handling of any chemical substance requires the previous knowledge of its hazards for the user. It is responsibility of the product user enterprise to promote the training of its employees and contractors about the possible risks arising from the product.

**Abbreviations:**

**ACGIH** - American Conference of Governmental Industrial Hygienists

**CAS** - Chemical Abstracts Service

**IARC** - International Agency for Research on Cancer

**IDLH** – Immediately Dangerous to Life or Health

**NIOSH** - National Institute for Occupational Safety and Health

**OSHA** - Occupational Safety & Health Administration

**PEL** – Permissible exposure limit

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NBR rubber powder

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Commission Regulation (EU) N° 453/2010*

Pages: 11 /11

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**REL – C** - Recommended Exposure Limit - Ceiling

**REL** - Recommended Exposure Limit

**STEL/ST** – Short Term Exposure Limit

**TLV** - Threshold Limit Value

**TWA** - Time Weighted Average

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