SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name (trade name)	**N-7920**.
Main recommended uses for the substance or mixture	Hoses, sealing rings, gaskets, conveyor belts, coating of hoses, cables, electrical wires, technical parts, coatings of rollers, and tanks.
Company Name	NITRIFLEX S.A. INDÚSTRIA E COMÉRCIO.
Address	Rua Marumbi, No. 1300 - Jardim Balneário Ana Clara. Duque de Caxias – RJ. ZIP Code: 25221-000.
Contact Phone	(55 21) 2128-3423/ 2128-3439.
Emergency Phone	(55 21) 2128-3423/ 2128-3439.

SECTION 2: HAZARD IDENTIFICATION

Chemical hazard classification	Product not classified as hazardous by the Classification System used.
Classification system used	Standard ABNT-NBR 14725-2:2009. *ABNT NBR 14725-2:2019 is equivalent to the ABNT NBR 14725-2:2009 set - Corrected version: 2010 - and Amendment 1, of 06.13.2019. Globally Harmonized System for the Classification and Labeling of Chemicals, UN.
Other hazards that do not result in a classification	When the polymer is heated it can cause some effects on human health.
PROPER LABELING ELEMENTS	
Pictograms	Not applicable.
Word of warning	Not applicable.
H Phrases	Not applicable.
Precautionary Phrases	Wash your hands after handling the product. When handling the product, do not drink, eat or smoke. It is recommended to use appropriate PPE when handling the product. Obtain product information before handling. Store the product in a suitable place. In case of emergency, proceed as indicated in the MSDS.

SECTION 3: INGREDIENTS COMPOSITION AND INFORMATION

SUBSTANCE			
Chemical or common name	Acrylonitrile/butadiene copolymer (NBR) and polyvinyl chloride (PVC).		
Synonym	Polymer with 2-propenenitrile and 1,3-butadiene; Acrylonitrile-1,3-butadiene copolymer; Butadiene/acrylonitrile copolymer. Polyvinyl chloride; PVC; chloroethylene polymer.		
Main components	Component	CAS registration number	Approximate concentration, %
	NBR	9003-18-3	70
	PVC	9002-86-2	30
Impurities that contribute to the hazard	There are no impurities that contribute to the hazard.		

SECTION 4: FIRST AID MEASURES	
Inhalation	Remove the victim to fresh air.
Skin contact	Wash the exposed skin with enough water to remove the material.
Eye contact	Rinse carefully with water for several minutes. In the case of contact lenses use, remove them if it is easy. If eye irritation persists: consult a doctor. Take this MSDS with you.
Ingestion	Do not induce vomiting. Do not give anything by mouth to an unconscious person. Wash the victim's mouth with plenty of water. If vomiting occurs, lean the patient forward or place the patient on the left side (upward if possible) to keep the airway open and prevent aspiration. Keep the patient quiet and maintain a normal body temperature. Consult a TOXICOLOGY CENTER or doctor. Take this MSDS with you.
Most important symptoms and effects, acute or delayed	During processing, the molten polymer in contact with the eyes can cause burns, and the vapors formed can irritate. Molten polymer can cause skin burns.
	The molten polymer can produce vapors during processing that may irritate the respiratory system and mucous membranes when inhaled in excess.
Notes to the doctor	Avoid contact with the product when helping the victim. Exposure treatment should be aimed at controlling the patient's symptoms and clinical status. In case of skin contact, do not rub the affected area. The

	molten polymer can burn and stick to the skin. Do not attempt to remove the burnt polymer, as it may make the burn worse. Cool the affected area with water and ice. A doctor must remove the plastic and treat the burn.

SECTION 5: FIRE FIGHTING MEASURES	
Means of extinguishing	Suitable: Water fog, chemical powder, synthetic foams, and carbon dioxide (CO_2). Not advised: direct water jets.
Specific hazards of the substance or mixture	Combustion of the chemical or its packaging can form: carbon monoxide (CO) and carbon dioxide (CO_2), monomer vapors and gaseous hydrochloric acid (HCl).
Fire-fighting team protection measures	Self-contained positive pressure respiratory protective equipment and full protective clothing. Keep people away and isolate the hazardous area. If the material is molten, do not apply water in a solid stream. Use nebulized water or foam. Cool the bordering areas to locate the fire zone. Manual carbon dioxide or chemical powder extinguishers can be used for small fires.

SECTION 6: CONTROL MEASURES FOR SPILLAGE OR LEAKS	
PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES	
For non-emergency service personnel	Don't smoke. Avoid contact with the product. If necessary, use personal protective equipment as described in section 8.
For emergency service personnel	Preventively remove sources of ignition. Use complete PPE: Goggles with side protection, suitable protective gloves, closed shoes, and safety clothing to protect the body. In the case of molten polymers, use heat-resistant PPE. Protective mask with a filter against mists and vapors when heated and for dust when the material is solid.
Environmental precautions	Prevent the product from reaching the ground and water courses. Notify the relevant authorities if the product has caused environmental pollution (if it has reached water courses or contaminated soil or vegetation).
Methods and materials for containment and cleaning	Collect the product with a clean shovel or other instruments that do not disperse the product. Place the material in appropriate containers and remove it to a safe place. For final disposal, proceed according to Section 13 of this MSDS.

Differences in the action of large and small leaks:	There are no known differences in intervention actions between small and large leaks.

SECTION 7: HANDLING AND STORAGE

APPROPRIATE TECHNICAL MEASURES FOR HANDLING

Precautions for safe handling	Avoid sources of ignition in the product handling areas. Handle in a ventilated area or with a general local ventilation/exhaustion system. Avoid dust formation (room temperature), mists and vapors (when heated/melted), and product exposure. Use personal protective equipment as described in section 8. Do not allow molten material to come into contact with eyes, skin, or clothing.
Hygiene conditions in the workplace	Wash hands and face thoroughly after handling and before eating, drinking, smoking, or using the toilet. Provide emergency shower and eyewash facilities at the handling site.

SAFE STORAGE CONDITIONS INCLUDING ANY INCOMPATIBILITY

Fire and explosion prevention	Keep away from any flames or ignition sources. Accumulation of static charges during pneumatic loading and other mechanical handling operations should be avoided as they can generate combustible powder. Keep the equipment properly grounded.
Suitable conditions for storage	Store the product in an airtight container in a dry, well-ventilated place. To maintain the quality of the product, do not store it in heat or direct sunlight.
Original packaging	Cardboard base and lid with polyethylene protection.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

CONTROL PARAMETERS

Environmental monitoring limits

Chemical name	TLV – TWA (ACGIH, 2021)	LT (NR-15, 1978)
A4 polyvinyl chloride	1 mg/m³ (R)	N.E.

A4 - Not classified as a human carcinogen.

(R) - Breathable particulate material.

N.E. Not established.

Biological monitoring limits	Not established.

Other limits	Not established.
Engineering control measures	Promote mechanical ventilation and direct exhaust system to the outside environment. These measures help to reduce exposure to the product.
	The product contains very small amounts of residual monomers and process chemicals, along with possible decomposition products that may arise during thermal processes. As the identity and content of these components depend on the processing conditions, it is the user's responsibility to determine appropriate protection or safety measures.
PERSONAL PROTECTION MEASURES	
Eye/face protection	Use safety glasses. Wear panoramic glasses if there is potential exposure to particulates that could cause eye discomfort.
Skin protection	Use natural rubber protective gloves. In the case of polymer melting processes, use gloves with thermal protection, suitable protective clothing and closed shoes.
Respiratory protection	In case of dust formation, wear respiratory protective equipment against dust – P2.
	In operations involving thermal processing, which may release vapors, it is advised to use a respirator mask with a chemical filter for organic vapors.
	Based on the inhalation hazard of the product, a risk assessment must be carried out to adequately define respiratory protection, given the conditions of the use of the product. Follow guidance from the Respiratory Prevention Program (PPR), Fundacentro.
Thermal protection	In the case of polymer casting, the use of thermal protection is advised, and care must be taken during handling as the product is slippery and can run off and spread on the floor.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, shape and color)	Solid in sheets.
Odor and odor limit	Characteristic.
pH	Not applicable.
Melting point / freezing point	Not assessed.

Initial boiling point and boiling temperature range	Not assessed.
Flash Point	Not assessed.
Evaporation rate	Not assessed.
Flammability (solid/gas)	Non-flammable.
Lower/upper limit of flammability or explosiveness	Not assessed.
Steam pressure	Not assessed.
Vapor density	Not assessed.
Relative density	Approximately 0.98 g/cm³.
Solubility	Insoluble in water.
Octanol-water partition coefficient	Not assessed.
Auto-ignition temperature	373°C.
Decomposition temperature	Not assessed.
Viscosity	Not assessed.
Further information	Not assessed.

SECTION 10: STABILITY AND REACTIVITY

Reactivity and chemical stability	Stable product under normal conditions of temperature and pressure.
Possibility of hazardous reactions	There are no known hazardous reactions with the product.
Conditions to avoid	Elevated temperatures, heat, friction, and contact with incompatible materials.
Incompatible materials	Oxidizing agents.
Hazardous decomposition products	The polymer decomposes under fire conditions. Vapors may contain polymer fragments of varying composition, in addition to toxic or irritating compounds.
	Polymer processing can generate smoke that may contain polymer fragments and other decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity	The product is not expected to present oral, dermal or inhalation toxicity.
Skin corrosion/irritation	The product is not expected to irritate the skin (in polymer form).
	In cases of polymer melting, contact can cause skin burns.
Serious eye damage/irritation	The product is not expected to cause eye irritation (in polymer form).
	In the case of polymer melting, contact can cause eye burns.
Respiratory or skin sensitization	The product is not expected to cause respiratory or skin sensitization.
Germ cell mutagenicity	The product is not expected to cause mutagenicity in germ cells.
Carcinogenicity	The product is not expected to cause cancer.
Reproductive toxicity	The product is not expected to cause reproductive toxicity.
Specific target organ toxicity - single exposure	In the case of polymer melting, vapors are released, which causes respiratory and mucosal irritation.
Specific target organ toxicity - repeated exposure	The product is not expected to cause target organ toxicity from repeated exposure.
Aspiration hazard	The product is not expected to present an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	The product is not expected to be harmful to aquatic organisms.
Persistence and degradability	Due to the absence of data, the product is expected to show persistence and not be rapidly degraded.
Bioaccumulative potential	The product is expected to have no bioaccumulative potential.
Mobility on the ground	The product has low mobility in the ground.
Other adverse effects	No other effects of the product are known.

SECTION 13: CONSIDERATIONS ON FINAL DESTINATION

ADVISED METHODS FOR FINAL DISPOSAL

Product	It must be disposed of as hazardous waste following local legislation. Treatment and disposal must be evaluated specifically for each product. Federal, state, and municipal laws should be consulted, including: Law No. 12.305 of August 2nd, 2010 (National Solid Waste Policy).

Product leftovers	Keep product residues in their original packaging and properly closed. Disposal must be carried out as established for the product.
Used package	Do not reuse empty packaging. These may contain product residues and must be kept closed and forwarded for proper disposal as established for the product.

SECTION 14: TRANSPORT INFORMATION

NATIONAL AND INTERNATIONAL REGULATIONS	
Terrestrial	Resolution 5.947 of June 1st, 2021, from the National Agency of Land Transportation (ANTT). Approves Supplementary Instructions to the Land Regulations for the Transport of Hazardous Goods and makes other provisions.
Waterway	DPC - Directorate of Ports and Coasts (Transportation in Brazilian waters)
	Maritime Authority Standards (NORMAM)
	NORMAM 01/DPC: Vessels Used in Open Sea Navigation
	NORMAM 02/DPC: Vessels Used in Inland Navigation
	IMO - International Maritime Organization
	International Maritime Dangerous Goods Code (IMDG Code).
Air	ANAC - National Civil Aviation Agency - Resolution N129 of December 8th, 2009.
	RBAC N175 - (BRAZILIAN CIVIL AVIATION REGULATION) - TRANSPORT OF HAZARDOUS GOODS IN CIVIL AIRCRAFT.
	IS N 175-001 - SUPPLEMENTARY INSTRUCTION - IS
	ICAO - International Civil Aviation Organization - Doc 9284-NA/905
	IATA - International Air Transport Association
	Dangerous Goods Regulation (DGR).
UN Number	Not classified as hazardous for different modes.

SECTION 15: REGULATORY INFORMATION

Regulations for chemical product	Federal Decree No. 2.657, of July 3rd, 1998. Ordinance No. 229, of May 24th, 2011 - Amends the Regulatory Standard No. 26. ABNT Standard NBR 14725-Part 4 (2014).

SECTION 16: OTHER INFORMATION

Relevant information not reported in the previous sections

This MSDS was prepared based on current knowledge of the proper handling of the product and under normal conditions of use, according to the application specified on the packaging. Any other form of use of the product that involves its combination with other materials, in addition to forms of use other than those indicated, is the responsibility of the user. It is noted that the handling of any chemical substance requires prior knowledge of its hazards by the user. In the workplace, it is the responsibility of the company that uses the product to promote the training of its employees and contractors regarding the possible risks arising from exposure to the chemical product.

Revised and adjusted in February 2022.

Captions and abbreviations used in the document
CAS – *Chemical Abstracts Service*
UN – United Nations

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