



## Safety Data Sheet

### Section 1: Identification

#### 1.1 Product identifier

RS30 & S-10

#### 1.2 Other means of identification

Coated abrasive, sandcloth & sandpaper.

#### 1.3 Recommended use of the mixture and restrictions on use:

Abrasive product for grinding, sanding and polishing of surfaces.

#### 1.4 Name, address, and telephone number of the mixture manufacturer, importer, or other responsible party

Fábrica Nacional de Lija, S.A. de C.V.

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#### 1.5 Emergency phone number

+52 (55) 5366 1421, Monday - Friday, 8:00 a.m. - 6:00 p.m. (CST)

### Section 2: Hazard Identification

#### 2.1. Hazard classification

Mildly irritating to eyes (Category 2B as Eye irritant, when the effects are fully reversible within 7 days of observation).

#### 2.2. Label elements



##### Hazard statement

<i>Code</i>	<i>Hazard statement</i>
H320	Causes eye irritation

##### Precautionary statements

<i>Code</i>	<i>Prevention precautionary statement</i>
P103	Read label before use.
P264	Wash hands thoroughly after handling

<i>Code</i>	<i>Response precautionary statements</i>
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

### 2.3. Hazards not otherwise classified

The main hazards for the use of coated abrasive products are related to the roughing particles from a substrate which are released in the surrounding environment. The hazards referred to in this Safety Data Sheets relate to a coated abrasive product, not substrate in which is to be applied.

The operation of machinery and equipment for abrasion, generates noise in the workplace that may affect the user.

## Section 3 - Composition/Information on Ingredient

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>% by Wt</b>
Aluminum Oxide Mineral	1344-28-1	5 – 9
Zirconium Oxide Mineral	1314-23-4	21 – 34
Potassium fluoroborate	14075-53-7	4 – 11
Cured Resin	CBI	13 – 19
Filler(s)	CBI	6 – 12
Polyester fabric backing	CBI	48 – 18

## Section 4: First – Aid Measures

### 4.1 Description of first aid measure

#### Inhalation:

Dust and particulate matter that can be detached from the solid mixture during normal use, if inhaled remove to fresh air, drink water and clean the nose with handkerchief. Get medical attention.

#### Skin Contact:

No adverse effects by simple contact are known. In case of injury by abrasion, apply pressure to the wound to control bleeding, remove any dirt from the wound, clean with soap and water and cover with sterile gauze. If signs/symptoms develop, get medical attention.

#### Eye Contact:

Eye irritation. Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### If Swallowed:

It is not a common route of exposure due to the physical form of the product (solid sheet of dimensions that do not facilitate ingestion). In case of ingestion of dust and particles, drink plenty of liquids, no need for first aid is anticipated, get medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

It may cause irritation to eyes on contact

### 4.3 Indication of any immediate medical attention and special treatment required

Not applicable

## Section 5: Fire-Fighting Measures

## 5.1 Extinguishing media

### Suitable Extinguishing Media

Water, wetting agents, dry chemical ABC or foam. Causes class "A" fires (ordinary combustibles).

### Unsuitable Extinguishing Media

No unsuitable extinguishing media is known within the common means for class "A" fire (ordinary combustibles).

## 5.2 Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).

Cotton cloth backing & cured resin are not flammable but they can burn and decompose.

### Hazardous Combustion Products

The combustion products of the mixture are soot, carbon dioxide and carbon monoxide.

## 5.3 Special protective equipment and precautions for fire-fighters

When the product is stored in an enclosed space can be generated irritating and toxic fumes, self-contained breathing apparatus (SCBA) should be used.

## Section 6 - Accidental Release Measures

The physical form of the product (solid sheet) does not facilitate accidental spill.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

Manual handling of the abrasive product requires level 2 abrasion resistant gloves.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

No special storage requirements. Keep away from sources of ignition.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

Ingredient	CAS No.	Agency	Limit type
Aluminum oxide Mineral	1344-28-1	ACGIH (US)	10 mg/m <sup>3</sup> TWA (total dust);
		NIOSH (US)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust);
		OSHA (US)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable traction)
		STPS (MX)(1)	10 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup> PPT
Zirconium Oxide Mineral	1314-23-4	ACGIH (US)	5 mg/mg <sup>3</sup> PPT 10 mg/m <sup>3</sup> CT
		NIOSH (US)	10 mg/m <sup>3</sup> CT 25 mg/m <sup>3</sup> IPVS
		OSHA (US)	5 mg/mg <sup>3</sup> PPT 10 mg/m <sup>3</sup> CT
		STPS (MX)(1)	5 mg/mg <sup>3</sup> PPT 10 mg/m <sup>3</sup> TWA (total dust);

Ingredient	CAS No.	Agency	Limit type
Potassium (limits as fluorides)	14075-53-7	ACGIH (US)	2.5 mg/m3 TWA
		NIOSH (US)	2.5 mg/m3 TWA
		OSHA (US)	2.5 mg/m3 TWA
		STPS (MX)(2)	2.5 mg/m3 TWA

## 8.2 Exposure controls

### Engineering Measures/Controls

Local Exhaust: Use to control exposure to fumes and dusts.

Mechanical Extraction: Hoods connected to exhaust ducts and dust collectors.

### General Industrial Hygiene Considerations

Handle in accordance with industrial hygiene and safety practices. Wash thoroughly with soap and water after handling and before eating or drinking.

## 8.3 Personal Protective Equipment

### Pictograms



### Respiratory

Use maintenance-free respirator for dusts (NIOSH N95 or better).

### Eye/Face

Wear safety glasses (ANSI / ISEA Z87.1 or better)

### Hands

Use abrasion resistant gloves (level 2 or better)

### Ears

Ear plugs or shells (recommended for cutting, grinding and polishing with machinery and equipment)

### Skin/Body

Work clothing (recommended)

## Section 9 - Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form</b>	Solid abrasive product
<b>Odour;</b>	Not Applicable (solid, doesn't emit odors)
<b>Odor threshold</b>	Not Applicable (solid, doesn't emit odors)
<b>pH</b>	Not Applicable (insoluble in aqueous medium)
<b>Melting point/freezing point;</b>	Not Applicable (does not melt & has no liquid material to solidify at low temperatures)

<b>Initial boiling point and boiling range;</b>	Not Applicable (does not boil)
<b>Flash Point</b>	Not Applicable (doesn't release vapors)
<b>Evaporation rate</b>	Not Applicable (doesn't evaporate)
<b>Flammability (solid, gas)</b>	Not Classified (solid that doesn't sublime)
<b>Lower Explosive Limits (LEL)</b>	Not applicable (not explosive even in direct flame)
<b>Upper Explosive Limits (UEL)</b>	Not applicable (not explosive even in direct flame)
<b>Vapor Pressure</b>	Not Applicable (solid) <b>Vapor</b>
<b>Density</b>	Not Applicable (solid)
<b>Relative density</b>	Not determined (solid sheet)
<b>Solubility(ies)</b>	Not applicable (insoluble in water and common solvents)
<b>Partition coefficient n-octanol/ water</b>	Not determined (insoluble in water and common solvents)
<b>Autoignition temperature</b>	Not determined (under normal storage and use conditions)
<b>Decomposition temperature</b>	Not determined (under normal storage and use conditions)
<b>Viscosity</b>	Not Applicable (solid)

## Section 10 - Stability and reactivity

### 10.1. Reactivity

This material is considered to be non-reactive under normal use conditions

### 10.2. Chemical stability

Stable

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur

### 10.4. Conditions to avoid

None known

### 10.5. Incompatible materials

None known

### 10.6. Hazardous decomposition products

Under high temperature and humidity may liberate hydrogen fluoride. Refer to section 5.2 for hazardous decomposition products during combustion

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects (Mixture)

<b>GHS Properties</b>	<b>Classification</b>
Acute toxicity	Not classified
Skin corrosion/ Irritation	Not classified
Serious eye damage/irritation	Category 2B. Mildly irritating to eyes, effects are fully reversible within 7 days of observation
Respiratory or skin sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Toxicity for reproduction	Not classified

Specific target organ toxicity, repeated exposure	Not classified
Aspiration Hazard	Not classified

## 11.2 Mixture ingredients information

### Aluminum Oxide (CAS No. 1344-28-1)

#### Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to Aluminum Oxide:

- Contact can irritate the skin and eyes.
- Inhaling Aluminum Oxide can irritate the nose, throat and lungs causing coughing, wheezing and/or shortness of breath.

#### Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to Aluminum Oxide and can last for months or years:

- Cancer Hazard: While Aluminum Oxide has been tested, it is not classifiable as to its potential to cause cancer.
- Reproductive Hazard: Aluminum Oxide has not been tested for its ability to affect reproduction
- Other Effects: Exposure for prolonged periods at high aluminum oxide concentrations (> 10 mg/m<sup>3</sup>, TWA) causes chemical and industrial bronchitis or aluminum pneumoconiosis (aluminosis).

### Zirconium Oxide (CAS No. 1314-23-4)

#### Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to Zirconium Oxide:

- Mechanical irritation may be observed in the upper respiratory system, eyes and skin.
- Pre-existing conditions may be aggravated by mechanical irritation when inhaled or in contact with skin and eyes.

#### Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to Zirconium Oxide and can last for months or years:

- Prolonged inhalation of this product may affect the ability to breathe.
- Cancer Hazard: Classification A4 ACGIH (not classifiable as a human carcinogen).

### Potassium fluoroborate (CAS No. 14075-53-7)

#### Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to Potassium fluoroborate:

- Contact with the eyes may cause irritation, tearing and redness.
- Prolonged contact with skin may cause abrasion, redness and itching.
- Ingestion of large amounts causes nausea, dizziness, vomiting, abdominal cramps and diarrhea.
- Inhaling may cause persistent cough and shortness of breath.

#### Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to Potassium fluoroborate and can last for months or years:

- Classification A4 ACGIH (not classifiable as a human carcinogen).
- Other effects: Fluorosis.

### Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to Zirconium Oxide:

- Mechanical irritation may be observed in the upper respiratory system, eyes and skin.
- Pre-existing conditions may be aggravated by mechanical irritation when inhaled or in contact with skin and eyes.

### Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to Zirconium Oxide and can last for months or years:

- Prolonged inhalation of this product may affect the ability to breathe.
- Cancer Hazard: Classification A4 ACGIH (not classifiable as a human carcinogen).

## **Potassium fluoroborate (CAS No. 14075-53-7)**

### Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to Potassium fluoroborate:

- Contact with the eyes may cause irritation, tearing and redness.
- Prolonged contact with skin may cause abrasion, redness and itching.
- Ingestion of large amounts causes nausea, dizziness, vomiting, abdominal cramps and diarrhea.
- Inhaling may cause persistent cough and shortness of breath.

### Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to Potassium fluoroborate and can last for months or years:

- Classification A4 ACGIH (not classifiable as a human carcinogen).
- Other effects: Fluorosis.

## **Section 12 - Ecological Information**

### **12.1 Toxicity, Persistence and degradability, Bioaccumulative potential, Mobility in Soil & Other adverse effects**

There are no studies.

### **12.2 Other Information**

The product is a solid with the ability to release dusts and particles during normal use and in emergency conditions. In a stream of water or air can contribute to the formation of sedimentary solids and suspended particles. In water treatment systems is expected to be resistant to chemical and biological degradation, but simple screening systems, sedimentation and filtration have the ability to retain it. In soil it's expected the mixture and its components to be not mobile and not decomposed by natural processes over long periods of time, but can be easily removed by simple selection and sweep up because they are not integrated in the medium.

## **Section 13 - Disposal Considerations**

### **13.1 Disposal methods**

#### **Product waste**

The residual product is not hazardous. The substrate that was grinded, sanded or polished and contact with coolants, cutting aids and other materials should be considered as factors in the elimination method. Before disposal, consult all authorities and take into account local / regional / national / international regulations applicable to ensure proper classification of the waste. Dispose product waste in a facility authorized for industrial waste. As an alternative to disposal, incinerate at a licensed waste incinerator. If no other disposal options available, the waste product can be deposited in a landfill properly designed for industrial waste.

#### **Packaging waste**

Most packaging materials used for this product can be recycled, and it is recommended to first consider recycling alternatives over other methods of management. Take into account local / regional / national / international regulations before selecting a method for waste management.

## Section 14 - Transport Information

Not regulated per DOT (US), IATA or IMO. Considered "General Cargo" according to SCT (MX).

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations specific for the substance or mixture

#### TSCA (EPA US)

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

#### State Right to Know

State Right To Know					
Component	CAS	Massachusetts	New Jersey	Pennsylvania	Minnesota
Aluminium oxide	1344-28-1	Listed	Listed	Listed	Listed
Zirconium Oxide	1314-23-4	Listed	Listed	Listed	Listed
Potassium fluoroborate	14075-53-7	Not listed	Not listed	Not listed	Not listed

#### California prop. 65

CAS No. 1344-28-1, 1314-23-4 & 14075-53-7 are not listed.

#### Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act

Consolidated List						
Component	CAS	Section (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ Section 313	RCRA CODE	CAA 112 (r)
Aluminium Oxide (fibrous forms)	1344-28-1			313		

(2) NOTE: The physical form of aluminum oxide used in coated abrasive products is pyramidal particle, not a fiber. Its information is presented in this table because its CAS number is found in the consolidated list of chemicals published by the EPA.

#### NOM-052-SEMARNAT-2005 (SEMARNAT, MEX)

Classified as non-hazardous waste, according to the results of the characterization tests or analyzes CRFT (Corrosivity - Reactivity - Flammability - toxicity), performed by an accredited laboratory.

## Section 16 – Other Information

### 16.1 Last Revision Date

Sep 1<sup>th</sup>, 2018



## 16.2 Revision details

NIVEL	FECHA	DETALLE DE REVISIÓN
1	May15 <sup>th</sup> , 2015	New document emitted according to the “Globally Harmonized System of Classification and Labelling of Chemicals” in its fifth revised edition and replacing document based on Mexican Official Standard NOM-018-STPS-2000 “System for the identification and communication of hazards and risks from hazardous chemicals in the workplace” with code of technical document HDS – PT-039 -19. It is published for the first time for S-10 product.
2	Sep 1 <sup>th</sup> , 2018	The Pictogram of the globally harmonized system was placed

## 16.3 Disclaimer/Statement of Liability

The above information is considered accurate and represents the best scientific information currently available. This information, and particularly the recommendations regarding the application and end use of the product are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions and within their lifespan. In practice, the differences in materials, substrates and actual site conditions are such that can't be described in the information in this document, or any written recommendations. For materials considered inert, as is the case for coated abrasives, the likely risks and environmental impacts depend mainly on the use therefore they should be analyzed for any particular application and take the preventive measures that emerge from this analysis.

## 16.4 Abbreviations and acronyms

**ACGIH:** American Conference of Governmental Industrial Hygiene

**CAS No:** Chemical Abstracts Service registry number

**CBI:** Confidential business information

**DOT:** Department of Transportation

**EPA:** Environmental Protection Agency

**GHS:** Globally harmonized system of classification and labelling of chemicals

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

**IATA:** International Air Transport Association

**IMO:** International Maritime Organization

**NIOSH:** National Institute of Occupational Safety and Health

**OSHA:** Occupational Safety and Health Administration

**pH:** Measure of the hydrogen ion concentration of a solution, in a scale that measures how acidic or basic an aqueous solution is, in a range from 0 to 14

**RTECS:** Registry of Toxic Effects of Chemical Substances database

**SCT (MX):** Ministry of Communications and Transport (Mexico)

**SEMARNAT (MX):** Ministry of Environment and Natural Resources (Mexico)

**STEL:** Short Term Exposure Limit, based on 15-minute exposures

**STPS (MX):** Ministry of Labor and Social Welfare (Mexico)

**TSCA (EPA):** Toxic Substances Control Act (Environmental Protection Agency)

**TWA:** Time-Weighted Average, based on 8 hour/day & 40 hour/week exposures