

## MATERIAL SAFETY DATA SHEET

Nr. Review: 01	Emission/Review date: 24/03/2020	Last review date: 23/08/2019	Code: FISPQ-SGQ-39
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### 1 – IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

#### 1.1 Product Identifier

Trade Name: Izer

#### 1.2 Application of the product

Ferrous decontaminant used to remove soot from oxidized wheels' brake.

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:** EVC Industrial LTDA

**Elaboration:** Paulo Henrique Sampaio Nobre

**CRQ (Regional Chemistry Council):** 10400261- 10th region

**Address:** Rua Luiz Francisco Xavier, 520, Paupina - Cep-60872-508

**Company's telephone number:** (085) 3274-2896

**Emergency telephone number:** 0800.014.1149

### 2 – HAZARDS IDENTIFICATION

#### 2.1 Product Hazards:

**Adverse human health hazards:** Contact with eyes may irritate.

**Environmental hazards:** May contaminate soil and rivers.

**Specific hazards:** The product is not classified as a dangerous product.

**Chemical Hazard:** NA

#### 2.2 Classification of Substance or Mixture

Acute Toxicity Classification: Category 5

#### 2.3 Signal Words

Warning!

#### 2.4 Hazard Pictogram

Not required

#### 2.5 Hazard statements

H303 - May be harmful if swallowed

H320 - Causes eye irritation

#### 2.6 Precautionary statements

P312 - Call a Poison Center/Doctor if you feel unwell

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### 3 - COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture

**3.1 Chemical Nature:** Carnaúba Wax and Sílica.

**3.2 Ingredients or impurities that may contribute to the hazard:** NA

### 4 - FIRST-AID MEASURES

**4.1 First aid measures:** Take the victim to an airy place. Remove contaminated clothing. Wash affected body parts with plenty of water and soap. If the victim is unconscious and no longer breathes, practice artificial respiration or oxygenation. Forward to the nearest medical service taking this file.

**4.2 After Inhalation:** Remove the person to an airy place. If they are not breathing, give artificial respiration. If breathing is difficult, consult a doctor immediately.

**4.3 After skin contact:** Immediately wash the affected area with soap and running water for at least 15 minutes. Remove contaminated clothing. In case of effects/symptoms, consult a doctor. Wash contaminated clothing before reuse.

**4.4 After eye contact:** Flush eyes with plenty of water for at least 15 minutes. Preferably use an eyewash. Seek medical assistance immediately, always carrying the product label and MSDS with the necessary information

**4.5 After ingestion:** Do not induce vomiting. Seek medical assistance immediately. It is possible that vomiting occurs spontaneously and should not be avoided; in this case, lay the patient on their side to prevent aspirating waste. **WARNING:** Never give anything orally to an unconscious person.

**4.6 Protection for first aid providers:** Avoid skin and inhalation contact with the product during the process.

**4.7 Recommendations for the Doctor:** Treatment is symptomatic and supportive. In case of ingestion, gastric emptying procedures such as gastric lavage should not be performed. In case of eye contact, wash with saline followed by occlusion and referral for ophthalmological evaluation. In cases of prolonged inhalation, respiratory manifestations may occur and should be treated symptomatically. In case of ingestion, if there are signs of digestive bleeding or abdominal pain, proceed to digestive endoscopy to assess the extent of the lesion.

### 5 – FIREFIGHTING MEASURES

**5.1 Suitable extinguishing media:** Non-flammable product. If a fire starts with other materials, use fire-extinguishing CO2, chemical powder and water extinguishing agent.

**5.2 For safety reasons, unsuitable extinguishing agents:** Do not use water extinguishing agent, when there are energized sources on site.

**5.3 Specific hazards:** There is no specific hazard due to its restriction containing more than 70% water.

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**5.4 Special firefighting methods:** The product does not present a risk for special fire methods. Non-flammable product.

**5.5 Special equipment for the protection of firefighters:** Due to the characteristics of the product, it is not necessary to use special equipment other than those commonly used.

## 6 - ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions:** Wear waterproof coveralls, protective glasses, rubber boots and PVC or nitrile gloves. Respiratory protection must be carried out depending on the concentrations present in the environment or the extent of the spill/leak; for that, one must opt for full-face or semi-face masks with replaceable filter or air adduction respirators (e.g., self-contained masks).

**6.2 Removal of ignition sources:** Interrupt the electrical power and turn off sources that generate sparks. Remove any material that may cause a fire (e.g., diesel oil) from the site. **Dust control:** not applicable because it is a liquid.

**6.3 Prevention of inhalation and contact with skin, mucous membranes and eyes:** Wear clothing and accessories as described above in the item Personal precautions.

**6.4 Environmental precautions:** Avoid contamination of watercourses by preventing the entrance of rainwater galleries (wolf mouth). Prevent spilled product residues from reaching water collections by building dikes with earth, sand or other absorbent material.

**6.5 Methods and material for containment and cleaning up:** Contain and collect spill with non-combustible absorbent materials (e.g., sand, earth, vermiculite, diatomaceous earth). Place the waste in a container for further treatment under local regulations. Clean preferably with a detergent; avoid the use of solvents.

## 7 - HANDLING AND STORAGE

**7.1 Fire and explosion prevention:** Do not store with incompatible materials.

**7.2 Prevention of worker exposure:** Wear PPE (boots, gloves, apron and protection goggles) when handling the product. Do not eat, drink or smoke when handling the product. When opening the packaging, do so in order to avoid leakage. Do not use damaged or defective personal protective and application equipment. Do not handle and/or load damaged packaging.

**7.3 Precautions for safe handling:** Use PPE as described in Item 8. Do not mix with chemical products, mainly with chlorine (e.g., bleach) and ammonia-based products.

**7.4 Guidelines for safe handling:** Use PPE as described in Item 8. Handle the product with the appropriate local exhaust or in a well-ventilated area; if in open environments, handle it with the wind. Apply only the doses recommended by the product registrant (see label).

### 7.5 Storage

**Adequate storage conditions:** Keep the product and, if necessary, leftovers in their original used packaging closed.

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### 7.6 Storage conditions

**Adequate:** Keep the container closed adequately at room temperature and protected from light. Store it in a duly identified location. Lock the place to prevent unauthorized people from accessing screens.

**To avoid:** Humid places with high temperatures.

**Incompatible products and materials:** Oxidizing agents. Do not store together with food, drinks, including those intended for animals.

### 7.7 Safe packaging materials

**Recommended:** Product already packed in appropriate packaging.

## 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

**8.1 Engineering control measures:** Use fans, air circulators, exhaust fans; provide adequate ventilation to the workplace.

### 8.2 Occupational Exposure Limits:

Component	No. CAS	Agency	Limit	Notes
Caustic Soda (NaOH)	1310-73-2	NR15 – ACGIH	TWA: 2 mg/m <sup>3</sup>	ND

NR-15 (Regulatory standard no. 15)

ACGIH - American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

### 8.3 Physical and chemical properties:

**Hands:** Gloves in the handling process to avoid direct and prolonged contact with the product.

**Eyes:** In operations where projections or splashes may occur, the use of protective goggles is recommended.

## 9 - PHYSICAL AND CHEMICAL PROPERTIES

**9.1 State of aggregation:** Liquid

**9.2 pH:** 7,0 a 9,0

**9.3 Color:** White

**9.4 Density at 25°C:** 0,83 to 0,86 g/cm<sup>3</sup>

**9.5 Viscosity at 25°C:** 600 a 2.000 cPs

**9.6 Water Solubility:** Soluble

**9.7 Odor:** Characteristic

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### 10 - STABILITY AND REACTIVITY

#### 10.1 Chemical stability

The product is stable at room temperature, under normal conditions of use and storage.

#### 10.2 Conditions to avoid

Temperatures above 50 °C, exposure to direct sunlight.

#### 10.3 Hazardous decomposition products:

Fire can release toxic gases and vapors that are harmful to human health.

#### 10.4 Reactivity

None

#### 10.5 Possibility of hazardous reactions

None

#### 10.6 Incompatible materials or substances

None

### 11 - TOXICOLOGICAL INFORMATION

**11.1 Local effects:** The product may cause local irritation, depending on the form of contact and other symptoms, as described in Item 2. The toxicological information values set out below may not reflect the toxicity value of the product because the ingredients may be below concentration, may not be available for exposure or may not be relevant to the material as a whole.

#### 11.2 Acute toxicity:

Name	Route	Specie	Valor
Product	Dermis	-	Estimated value: LD50 > 5000 mg/Kg
Product	Ingestion	-	Estimated Value LD50 > 5000 mg/Kg
Caustic Soda (NaOH)	Ingestion	Rat	LD50 = 140 – 340 mg/Kg
Caustic Soda (NaOH)	Dermis	Rabbit	LD50 = 1.350 mg/Kg

LD – Lethal dose

LC –Lethal concentration

**11.3 Skin corrosion/irritation:** Based on the available information, this product does not have a classification for this criterion.

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**11.4 Serious eye damage/irritation:** Based on the available information, this product does not have a classification for this criterion.

**11.5 Skin sensitization:** Based on the available information, this product does not have a classification for this criterion.

**11.6 Mutagenicity:** Based on the available information, this product does not have a classification for this criterion.

**11.7 Carcinogenicity:** Based on the available information, this product does not have a classification for this criterion.

**11.8 Chronic Toxicity:** Based on the available information, this product does not have a classification for this criterion.

## 12 – ECOLOGICAL INFORMATION

### 12.1 Environmental, behavioral effects and product impacts

**Mobility:** ND

**Environmental behavior:** Effects are not expected in consequence of proper use of the product. However, its improper use and contact with soil or aquatic environment can cause imbalance and damage.

**Degradability:** ND

**Bioaccumulation:** ND

**Ecotoxicity:** ND

## 13 – TREATMENT AND DISPOSAL CONSIDERATION

### 13.1 Waste treatment methods:

**Product:** The product must be collected in containers for final determination under current legislation. The improper destination of empty packaging and product remains in the environment causes contamination of the soil, water and air, harming fauna, flora and people's health.

**Used package:** This package can be washed and recycled. Throw the empty packaging in the trash.

## 14 - TRANSPORT INFORMATION

**14.1 UN-Number**

**ADR, IMDG, IATA**

Void

**14.2 UN Proper Shipping Name**

**ADR, IMDG, IATA**

Void

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### 14.3 Transport Hazard Class(es)

ADR, IMDG, IATA

Void

Class

### 14.4 Packing Group

ADR, IMDG, IATA

Void

### 14.5 Environmental Hazards

Not applicable

### 14.6 Special Precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## 15 – REGULATORY INFORMATION

**15.1 National regulations:** SANITATING PRODUCT NOTIFIED AT ANVISA, No. 25351349557/2019-13, according to current legislation.

**15.2 International regulations:** Contact EVC Industrial for further information

## 16 - OTHER INFORMATION

The information and recommendations contained in this MSDS were obtained from reputable sources and based on previous experiences, refer to this specific product and are valid when used according to the label's guidelines. This document was approved electronically.

## ABBREVIATIONS AND ACRONYMS

**NA:** Not applicable

**ND:** Not Determined

**OSHA:** Occupational Safety and Health Administration.

**LD50:** Lethal dose, 50 percent

**LC50:** Lethal concentration, 50 percent

**CAS:** Chemical Abstracts Service.

**TLV-TWA:** Threshold Limit Value – Time-Weighted Average

**TLV-STEL:** Threshold Limit Value – Short-term exposure

**ACGIH:** American Conference of Governmental Industrial Hygienists is an organization open to all practitioners in industrial hygiene, occupational health, environmental health, or safety.

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**PEL:** Permissible Exposure Limit

**OSHA:** Occupational Safety and Health Administration.

**GGVE/GGVS:** Gefahrgutverordnung Eisenbahn Bzw Strasse – decree on the transport of hazardous materials by land (railroad and highway).

**GGV-See:** Gefahrgutverordnung-See – decree on the transport of hazardous materials by sea.

**IMDG:** International Maritime Dangerous Goods – international code for the transport of hazardous materials by sea.

**CAO:** Cargo Aircraft Only – cargo authorized for transportation by cargo plane.

**PAX:** Passenger Aircraft – amount allowed for transportation on a commercial airplane.

**AEL:** is the acceptable exposure limit. In places where the occupational exposure limits imposed by government agencies are lower than the AEL, these limits should be preferred.