

## MATERIAL SAFETY DATA SHEET

Nr. Review: 01	Emission/Review date: 24/03/2020	Last review date: 28/03/2019	Code: FISPQ-SGQ-36
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### 1 – IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

#### 1.1 Product Identifier

Trade Name: Revox

#### 1.2 Application of the product

Synthetic tire sealant, formulated to protect, shine and renew its appearance, in addition to promoting total water repellency.

#### 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:** The product may irritate the eyes, respiratory tract and skin. Prolonged contact should be avoided to avoid possible damage to health.

**Environmental hazards:** May contaminate the environment if scattered. Avoid entering watercourses. Dangerous for aquatic organisms and may cause death.

**Physical, chemical and other specific hazards:** There is no other hazard related to the product.

**Main Symptoms:** In case of eye contact, pain, redness, blurred vision, a burning sensation may occur. In the case of ingestion, the symptoms can be a burning sensation, abdominal pain, diarrhea, nausea and vomiting. In the case of inhalation of large quantities of the product, headaches, a feeling of weakness, dry throat, cough, drowsiness, dizziness and nausea may occur.

#### 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

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H303 - May be harmful if swallowed

H320 - Causes eye irritation

### 2.6 Precautionary statements

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

## 3 - COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture

### Ingredients or impurities that may contribute to the hazard:

Chemical name	CAS No.	Concentration %	Classification*	Notes
Aliphatic hydrocarbons	64742-47-8	2 to 4%	2	Aspiration hazard
Morpholine	110-91-8	0,1 TO 0,4 %	8	ND

\*Classification system adopted: Standard ABNT-NBR 14725-Part 2: 2009. Adoption of the Globally Harmonized System for the Classification and Labeling of Chemicals, UN.

## 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 seek medical service 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. **What actions should be avoided:** Do not apply mouth to mouth breathing if the patient has ingested the product. Use an intermediate manual resuscitation or ambulatory equipment to perform the procedure.

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

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the process.

**4.7 Notes to doctor:** Treatment is symptomatic and supportive. In the 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:** Foam, CO<sub>2</sub>, chemical powder.

**5.2 Unsuitable extinguishing media:** Jet of water directly onto the burning product, for it can spread violently and increase the intensity of the fire.

**5.3 Special Procedures:** Non-flammable product. Evacuate the area and fight the fire from a safe distance. Use dikes to contain the water used in combat. Position yourself with your back to the wind. Use water in the form of fog to cool equipment exposed in the vicinity of the fire.

**5.4 Hazardous Decomposition Products:** Exposed to fire, product decomposition releases carbon monoxide, carbon dioxide and smoke, making the environment asphyxiating. Use a self-contained respirator to approach.

**5.5 Special protective equipment for firefighting:** Self-contained breathing apparatus and appropriate clothing for firefighting.

**5.6 Firefighting measures:** Respiratory equipment and protective clothing must be used in firefighting involving chemicals. Boiling points are reported in the respective product safety data sheets. It determines the need to evacuate or isolate the area, according to your local emergency plan. Use a water jet to keep the container fresh.

### 6 - ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions:** Wear waterproof coveralls, protection goggles, rubber boots and PVC or nitrile rubber 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 a replaceable filter or air adduction respirators (e.g., self-contained masks).

**6.2 Removal of ignition sources:** Interrupt electrical power and turn off sources that generate sparks. Remove all local material that could cause a fire.

**6.3: Prevention of inhalation and contact with skin, mucous membranes and eyes:** Wear clothing and accessories as described above, in Item 6.1 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. Place the waste in a container for disposal according to local regulations. Clean preferably with water, avoiding the use of solvents. For large spills, contain the liquid in dikes and pump it into suitable containers.

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**6.6 Prevention of secondary hazards:** Avoid the product that contains streams, lakes, water sources, wells, rain photos and effluents.

## 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 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.

### 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:**

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Component	No. CAS	Agency	Limit	Notes
Morpholine	110-91-8	ACGIH	TWA: 20 ppm	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:

**Hand protection:** Gloves during the handling process to avoid direct and prolonged contact with the product.

**Eye protection:** In operations where splashes may occur, the use of safety glasses is recommended.

**Hygiene measures:** General control methods used in industrial hygiene should minimize exposure to the product. Do not eat, drink or smoke when handling chemicals—separate work clothes from ordinary clothes.

**Respiratory protection:** In the process of spraying the product, it is recommended to use a respiratory protector.

## 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 State of aggregation: Viscous Liquid

9.2 Color: Lilac

9.3 Odor: Characteristic

9.4 pH: ND

9.5 Specific temperatures or temperature ranges in which physical state changes occur: ND

9.6 Boiling point: 110°C

9.7 Fusion Point: ND

9.8 Flashpoint: ND

9.9 Lower explosive limit: ND

9.10 Upper explosive limit: ND

9.11 Specific gravity: ND

9.12 Steam pressure: ND

9.13 Automatic ignition temperature: ND

9.14 Density at 20°C: 0,99 a 1,01 g/cm<sup>3</sup>

9.15 Solubility in water: Insoluble

9.16 Auto flammability: ND

9.17 Coefficient participation: ND

9.18 Asset content: ND

9.19 Viscosity: 30.000 a 60.000 cPs

## 10 - STABILITY AND REACTIVITY

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### 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	Value
Product	Dermis	-	No defined value it is estimated LD50 > 5.000 mg/Kg
Product	Ingestion	-	No defined value it is estimated LD50 > 5.000 mg/Kg
Aliphatic hydrocarbons	Dermis	Rabbit	LD50 > 3.160 mg/kg
Aliphatic hydrocarbons	Inhalation	Rat	LC50 > 3.0 mg/L
Aliphatic hydrocarbons	Ingestion	Rat	LD50 > 5.000 mg/kg
Triethanolamine	Ingestion	Rat	LD50 = 16 mL/Kg
Triethanolamine	Ingestion	Rabbit	LD50 = 2000 mg/Kg

LD – Lethal dose

LC –Lethal concentration

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

**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.

**Product remnants:** Do not improperly discard product remnants after use. Depending on the leftover quantity, store appropriately for a new application. Keep any leftovers with expired validity in their original containers adequately closed.

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

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### 14 - TRANSPORT INFORMATION

**National and international land/waterway/air regulations:** Non-hazardous product according to transport regulation criteria.

### 15 – REGULATORY INFORMATION

**15.1 National regulations:** SANITATING PRODUCT NOTIFIED AT ANVISA, No. 25351.121365/2019-36, 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.

**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:** Gefahrgutverdnungg-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.



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**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.