



1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the substance or preparation:

Product name: **RARX®**
 Material Uses: Elastomeric Asphalt Extender
 Company identification: U-87788972
 Registered company name: CIRTEC (Círculo Tecnológico 2020 S.L.)

2 HAZARDS IDENTIFICATION

Physical State:	Solid, Powder.
Color:	Black with Brownish earth color granules.
Emergency Overview:	<p>If ignited by excessive heat or open flame, this product will burn causing the release of toxic and irritating smoke. Smoke may contain noxious compounds and acrid compounds of Sulphur. During fire conditions, smoke is irritating to the eyes and respiratory tract.</p> <p>May cause eye irritation.</p> <p>Avoid contact with eyes. Wash thoroughly after handling.</p> <p>May be slightly toxic to aquatic organisms.</p> <p>Powder or dust may form explosive concentrations when mixed in sufficient quantities of air.</p>
Possible Chronic Effects:	
Crumb Rubber	Based on available information, not classified as hazardous according to criteria of Safe Work
Petroleum pitch	Heated Petroleum derivatives can cause severe skin burns and eye Injury. Eye, skin, gastrointestinal, and respiratory tract irritation can occur.
	Inhalation, ingestion, skin or eye contact See Toxicological Information (section 11)



MATERIAL SAFETY DATA SHEET

3 COMPOSITION/INFORMATION

Name	CAS		Proportion
Natural mineral	Na		Less than 40%
Bitumen/Oil/	Na		Less than 30%
Calcium Hydroxide, Ca(OH) ₂ (Hydrated Lime)	1305-62-0		Less than 20%
Crumb Rubber: Reprocessed rubber	Naphthenic/Aroma- tic Extender Oil	64742-02-7	Less than 80%
	Carbon Black	1333-86-4	
	Talc	64742-02-7	
	Zinc oxide	1314-13-2	
	Sulphur	7704-34-9	

4 FIRST AID MEASURES

Eye: Do not rub eyes, which may cause particles to scratch the eye.

Contact: Immediately flush contaminated eye(s) with lukewarm, gently running water for at least 5-15 minutes while holding the eye lid(s) open. Take care not to rinse contaminated water into non-affected eye. Neutral saline solution may be used for flushing if available. If eye irritation persists, transport victim to medical facility.

Skin: Wash skin gently with soap and water to remove dust.

Contact: If irritation occurs and/or persists, seek medical attention.

Inhalation: Remove to fresh air. Drink water to clear throat. Blow nose to remove dust.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or is convulsing. Since the effect if ingestion of rubber has not been determined, only seek immediate medical help if large quantities have been ingested.



MATERIAL SAFETY DATA SHEET

5 FIRE-FIGHTING MEASURES

Conditions Of Flammability:

Will burn when exposed to excessive heat or flame.

Auto ignition Temperature:

350-450 °C

Hazards from combustion products:

Combustible solid. In common with many organic chemicals, may form flammable dust clouds in air. Unidentified hydrocarbons in smoke, oxides of Sulphur and carbon.

Precautions for fire fighters and special protective equipment:

On burning, will emit toxic fumes, including those of oxides of carbon. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapor or products of combustion.

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

6 ACCIDENTAL RELEASE MEASURES

Use proper personal protective equipment as listed in section 8.

Release of powdered rubber into the environment may cause particulate to form an explosive mixture in air. If release of ground rubber results in the formation of dust, remove all sources of heat and ignition. Provide immediate and plenty of ventilation.

Contain spilled material for disposal or recycling.

If sweeping is necessary, use dust suppression such as water. Do not dry sweep dust accumulation or use compressed air for cleanup. Material may be reused in process if clean, otherwise collect in approved containers and dispose according to the requirements in section 13.

7 HANDLING AND STORAGE

Handling:

When handling product minimize dust formation. Keep away from sources of heat, flame or ignition. Add water to any spilled product before attempting a clean-up. Wash hands thoroughly after handling and before eating, drinking, using tobacco products, or using the restroom.

Storage:

Ground all transfer and storage equipment and use only non-sparking tools and equipment. Store in a cool dry place away from sources of heat or ignition.



MATERIAL SAFETY DATA SHEET

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Use general or local exhaust ventilation to maintain exposure below the exposure limits. (See section 2)

If heated during processing, provide adequate non-sparking ventilation to minimize fumes in the workplace.

Engineering Personal Protective Equipment:

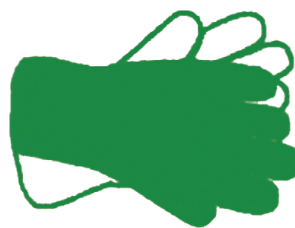
Wear loose fitting clothing that covers exposed areas. Frequent washing of exposed areas is recommended. Eye protection is required such as safety glasses with side shields. The wearing of contact lenses is not recommended.

Footwear as required by worksite rules, but impervious. Have a safety shower and eyewash station readily available in the immediate work area.

Respiratory Protection:

Under normal conditions of use, respiratory protection is not necessary. If dusting is an occurrence during processing, then use of a particulate N95 respirator is recommended.

Respiratory Protective Clothing (Pictograms):



EXPOSURE LIMITS:

Chemical Name Crumb rubber

Reprocessed rubber
Naphthenic/Aromatic
Extender Oil
Carbon Black
Zinc oxide
Sulphur

Mineral Natural

Quartz SiO₂

ACGIH TLV-TWA

10 mg/m³
Not applicable
3.5 mg/m³
10 mg/m³
0.025 mg/m³
(Respirable particles)

OSHA PEL TWA

Dust 15 mg/m³
Mist 5 mg/m³
35. mg/m³
5 mg/m³ total dust



MATERIAL SAFETY DATA SHEET

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Black powder
Odor And Appearance:	Mild Rubber, Black with Brownish earth color granules
Odor Threshold:	Not determined
Boiling Point:	Not applicable
Evaporation Rate:	Not applicable
Melting Point:	Not applicable
Freezing Point:	Not applicable
Bulk density	0.59 -0.62 gr/lit

10 STABILITY AND REACTIVITY

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur
Conditions of Chemical Instability:	Avoid strong oxidizing agents.
Incompatible Substances:	Avoid strong oxidizing agents.
Special Decomposition Products:	Carbon monoxide, carbon dioxide, hydrogen, hydrogen sulphide, pentadiene, benzene, xylene, carbon, ash, oxides of Sulphur and nitrogen, zinc oxide, and numerous unidentified organic compounds.



MATERIAL SAFETY DATA SHEET

II TOXICOLOGICAL INFORMATION

Effects of acute exposure:

Inhalation: Inhalation of fine particles may cause mild irritation of the respiratory tract. Fumes generated during processing may also be mildly irritating to the eyes and respiratory tract.

Skin Contact: Not expected to have any acute effects.

Eye Contact: Contact with eyes will cause general irritation such as occurs when foreign object enters the eye. Redness, itchiness, and tearing may result.

Ingestion: The acute effects of ingestion rubber have not been determined. This product is a mechanical irritant for which no LD50 has been established.

Effects of chronic exposure:

There is evidence that contact with ground rubber may aggravate pre-existing dermatitis.

General Irritancy of Product:

Notes to Physician: This product is a mechanical irritant and is not expected to have any chronic health effects for a single exposure. Treat exposure by removing source of irritation and treating symptomatically.

Sensitization:

See section 3

Carcinogenicity:

Not classifiable as to its carcinogenicity to humans. Classified None by OSHA

Reproductive Toxicity:

No

Embryotoxicity:

Not Available

Mutagenicity:

No

Synergistic Products:

None reported



12 ECOLOGICAL INFORMATION

Ecotoxicity: Avoid contaminating waterways.
Environmental Fate: Not Available

13 DISPOSAL CONSIDERATIONS

Waste Disposal: Place used and contaminated material and packaging into suitable containers. Review and follow all local, and national regulations before disposal.

14 TRANSPORT INFORMATION

Regulatory Information

UN number:	Not regulated
Proper shipping name:	RARX®
DOT Classification:	Not regulated
TDG Classification:	Not regulated
IMDG Class:	Not regulated
IATA-DGR Class:	Not regulated
Packing Group:	Not regulated
Label:	Not regulated

15 REGULATORY INFORMATION

Workplace Hazardous Information Systems Data (WHMIS):

Class ID Class Work Place Hazard

None Not a Controlled Product

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

HCS Classification Not controlled under the HCS (United States).

U.S. Federal Regulations TSCA: All intentionally present components are listed on the TSCA inventory.

DSL: All intentionally present components are listed on the DSL.

16 OTHER INFORMATION

Other Information: RARX is a registered trademark of SHRP Equipment Corp.

The information in the material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable as of the date of publication. However, no warranty is made as to the accuracy of and/or sufficiency of such information and/or suggestions or as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nothing contained herein shall be construed as granting or extending any license under any patent. Buyer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current.