

Material Safety Data Sheet

Renner Protective Coatings



1 - PRODUCT AND COMPANY IDENTIFICATION

Product: **REKOMAR FBR 610 (N) VERMELHO OXIDO 10R3/6**
RECOMMENDED USE: Corrosion Protection.

Code: 6109412

Manufacturer's name: RENNER HERRMANN S.A.
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2 - HAZARD IDENTIFICATION

Flammable liquids, Category 3.
Acute toxicity (Oral), Category 5.
Acute (Dermal) Toxicity, Category 4.
Acute toxicity (Inhalation: dust, fog), Category 4.
Corrosion / Irritation to skin, Category 2.
Serious eye damage / eye irritation, Category 2A
Specific target organ toxicity - single exposure, Category 3, Respiratory tract irritation.
Specific target organ toxicity - Repeated exposure, Category 2.
Aspiration hazard, Category 1.
Hazardous to the aquatic environment - Acute, Category 2.

Product classified according to ABNT 14725-2.



WORD OF CAUTION: Danger

DANGEROUS PHRASES:

H226 - Flammable liquid and vapor.
H303 - May be harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H312 + H332 - Harmful in contact with skin or if inhaled.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H373 - May cause damage to organs (organs of the ears) by repeated or prolonged exposure.
H401 - Toxic to aquatic organisms.

PRECAUTIONARY PHRASES:

P210 - Keep away from heat, sparks, open flames, hot surfaces. - Do not smoke
P233 - Keep container tightly closed.
P240 - Ground the container and receiver of the product during shipment
P241 - Use electrical equipment, lighting, explosion-proof ventilation.
P242 - Only use anti-sparking tools
P243 - Avoid the accumulation of electrostatic charges
P260 - Do not inhale vapors, mist
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment
P280 - Wear eye protection, protective clothing, protective gloves
P301 + P310 - IF SWALLOWED: Immediately contact a physician, a TOXICOLOGICAL INFORMATION CENTER
P302 + P352 - IF ON SKIN: Wash with plenty of water
P303 + P361 + P353 - IF ON SKIN (or with hair): Take off all contaminated clothing immediately. Rinse skin with water / shower
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. In case of contact lenses, remove them if it is easy. Keep rinsing
P312 - If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER
P314 - If in discomfort, seek medical advice.
P331 - Do NOT induce vomiting
P332 + P313 - In case of skin irritation: Get medical advice / attention
P337 + P313 - If eye irritation persists: Get medical advice / attention
P362 + P364 - Remove contaminated clothing and wash before reuse.
P370 + P378 - In case of fire: For extinction use carbon dioxide (CO₂), dry extinguishing powder, extinguishing foam
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 - Store in a well-ventilated place. Keep in a cool place.
P405 - Store locked
P501 - Dispose of contents / container to a hazardous or special waste collection point in accordance with local, regional or international regulations.

EFFECTS OF OVEREXPOSURE:

INGESTION:

Toxicity of a single oral dose is considered low. The accidental ingestion of small quantities related to the handling of the product is not expected to cause any harm. It might be dangerous if paint film or dry paint film is chewed or swallowed.

EYES:

In case of prolonged exposure, it may cause severe eye irritation, redness, burning sensation, visual disturbances and itching.

SKIN:

The prolonged contact with skin may cause allergic reactions, dryness, lesion, and contact dermatitis.

INHALATION:

Irritation of respiratory system, besides headache, dizziness and nausea. Continuous exposure to sanding dust may also lead to respiratory and skin problems.

3 - COMPOSITION / INFORMATION ON INGREDIENTS

PRODUCT TYPE: Mix

CHEMICAL NATURE: Solvent-based alkyd paint

Chemical Name	CAS Number	Concentration Range (%)
Mixed xylene	1330-20-7	16,00 – 26,00
Mineral turpentine	68477-39-4	4,00 – 14,00

Hazardous ingredients: CLASSIFICATION SYSTEM:

The ingredients were classified according to Guideline 67/548/EEC.

4 - FIRST AID MEASURES

INHALATION:

If inhaled, move to fresh air. Aid in breathing (mouth-to-mouth respiration), if necessary, and get medical attention.

SKIN CONTACT:

Remove contaminated clothing; wash affected skin with flowing water and soap. If the product adheres to skin and it is difficult to remove it with water, use vaseline, mineral oil or vegetal oil. If symptoms persist. Get medical attention.

EYE CONTACT:

Flush eyes with large amounts of water, for at least 15 minutes, maintaining the eyelids open. Get urgent medical attention.

INGESTION:

Do not induce vomiting. If the victim is unconscious, and vomiting occurs involuntarily, turn the victim sideways, and see that he/she rests. Get urgent medical attention. If swallowed large quantity of liquid or solid material, it may be necessary to proceed with gastric washing up. Drink water or milk.

ACTIONS TO BE AVOIDED:

Skin contact.

DESCRIPTION OF MAIN SYMPTOMS AND EFFECTS:

Throat irritation in case of long-term exposure to vapours

PROTECTION OF FIRST AID APPOINTED PERSON:

In case of accidents of great proportions, the first aid provider shall have full protective equipment available. Remove contaminated clothing.

INFORMATION FOR PHYSICIANS:

Gastric wash up is necessary, especially in children, when large quantities ingestion. Proceed with gastric wash up only after the person has been intubated. Gastric decontamination is indicated when dry paint is swallowed.

SYMPTOMATIC TREATMENT:

If possible, contact a Toxicological Center.

5 - FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

Dry chemical, carbon dioxide or foam. Water spraying may also be used, although not so effective. Besides, water spraying may be used to cool the container.

UNSUITABLE EXTINGUISHING MEDIA:

Water jetting.

SPECIFIC HAZARDS:

Flammable product. Monoxide and carbon dioxide may be released. These are irritating and poisonous gases. Closed containers may explode when exposed to extreme heat. In case of fire, water spraying may be used to cool the containers. Keep containers closed when not used.

SPECIAL METHODS:

Cool containers that are close to the fire with water spraying.

FIREFIGHTER PROTECTION:

Wear appropriate individual protective equipment and respirator.

6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Putting people safe. Avoid direct contact with the product.

ENVIRONMENT PRECAUTIONS:

If large quantity leaks, remove liquid using inert absorbing material, such as sand, vermiculite, etc. Avoid that the product gets in contact with soil, rivers and lakes.

METHOD FOR CONTAINMENT AND CLEANING:

Remove contaminated diking material and transfer to an emergency tank. Store product in properly labeled emergency container (labeled) and closed for recycle or disposal.

DISPOSAL:

Consult a local expert for advice on the disposal of this material. Ensure that disposal is in compliance with local, national.

REMOVAL OF IGNITION SOURCES:

Flammable product. Keep away from any ignition sources (flames, sparks, etc), and turn off any equipment or electrical networks that may be in contact with the product.

DUST CONTROL:

Unnecessary as the product is liquid.

ALARM SYSTEM:

If waters are contaminated, inform governmental local authorities.

PREVENTION FOR SECONDARY HAZARDS:

Containers shall not be reused. They must be disposed of or recycled according to local legislations.

7 - HANDLING AND STORAGE**HANDLING:**

Handle the product only in well-ventilated areas.

PERSONAL PROTECTION:

Handle the product only in well-ventilated area, and wear proper personal equipment (see item 8). Do not throw nor let the product container to drop. The container must be kept closed when not in use. After using the product, and before ingesting any type of food, smoking or using toilet, wash hands properly.

FIRE AND EXPLOSION PREVENTION:

The product contains volatile organic solvents and fuel. Keep containers well closed, protected from heat sources, and distant from any ignition sources.

PRECAUTIONS FOR SAFE HANDLING:

Wear proper personal equipment.

RECOMMENDATION FOR SAFE HANDLING:

Avoid contact with skin, mucous and eyes.
Handle the product only in well-ventilated areas.
Do not reuse container.
Do not smoke, eat or drink in the handling area.

STORAGE**TECHNICAL MEASURES:**

Keep containers well closed, protected from intense heat. Do not store near food. Keep children away from the product.

STORAGE CONDITIONS

Proper: Sheltered, cool, dry and ventilated areas.

Conditions to avoid: Avoid storing it where there is strainer or any other form of drainage nearby as it may infiltrate into wastewater drainage and / or sewers.

INCOMPATIBLE PRODUCTS AND MATERIALS:

Do not store it near corrosive and/or toxic products, organic peroxides, materials of spontaneous combustion and radioactive materials.

SAFE MATERIALS FOR PACKAGING:

Adequate: Metal containers.
Inadequate: Plastic containers

8 - EXPOSURE CONTROL / PERSONAL PROTECTION**SPECIFIC CONTROLS:**

Exposure limits:

Chemical Name	TLV/TWA (mg/m3)	TLV/STEL (ppm)	NR 15 (ppm)
Mixed xylene	100	150	78
Mineral turpentine	100	NA	NA

ENGINEERING CONTROLS:

Provide sufficient ventilation, keeping doors and windows opened for air circulation. Closed environments shall be provided with air exhaustion devices. If it is impossible to provide natural or equipment ventilation, wear respirator with filter for organic vapors.

PERSONAL PROTECTIVE EQUIPMENT:**EYE PROTECTION:**

Safety glasses or chemical goggles.

SKIN AND BODY PROTECTION:

Wear body protection to avoid contact with product.

RESPIRATORY PROTECTION:

Wear respirator with filter for organic vapors, with forced ventilation.

PROTECTION FOR HANDS:

Rubber gloves.

THERMAL HAZARDS: Not available

MONITORING RECOMMENDED PROCEDURES:

Labor Ministry regulation standard nº 15, Fundacentro working neatness standards, procedures NIOSH or ACGIH.

9 - PHYSICAL - CHEMICAL PROPERTIES

Product:
 Appearance: Fluid
 Color: Red
 Odor: Characteristic
 pH: Not Available.
 Melting point: 13.2 °C (xylene)
 Boiling point: 143°C (Xylene)
 Flash Point: 17 °C (Xylene)
 Evaporation Rate: NA
 Flammability: Gas
 Explosion limits (% volume):
 Lower Limits: 1,0 Vol. % (Xylene)
 Upper Limits: 7,0 Vol. % (Xylene)
 Vapor pressure (mmHg at 20°C): Not Available.
 Vapor density (air = 1): Not Available.
 Mass solids (% mass): 51,00 – 55,00
 Specific weight: 0,9150 – 1,0150
 Solubility: water insoluble
 Partition Coefficient: NA
 Auto-ignition temperature: NA
 Decomposition Temperature: NA
 Viscosity: NA

10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY / REACTIVITY:

Stable under normal conditions of storage and use.
 See instructions on sections 5 and 7 on fire hazards.

POSSIBILITY OF HAZARDOUS REACTIONS:

There won't be any dangerous reactions if product is stored, applied and processed correctly.

CONDITIONS TO AVOID:

Avoid high temperatures and contact with oxidizing vehicles, heat and ignition sources.

INCOMPATIBLE MATERIALS OR SUBSTANCES:

Oxidizing materials, strong acids and strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion releases toxic gases such as CO, CO2 and NOx.

11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Chemical Name	DL50	CL50	Carcinogenicity	Teratogenicity	Mutagenicity	Toxic Doses
Mixed xylene	Ingestion: 3500 mg/kg	NA	-	-	-	-
Mineral turpentine	Skin : 3.000 mg/kg Ingestion, : 5.000 mg/kg	Inhalation: 5,5 mg/L (4h)	-	-	-	-

SKIN IRRITATION

Acute: Moderate irritation.

Chronic: Contact for long period may cause dermatitis and skin dryness.

EYE IRRITATION

Acute: Accidents with splatters may result in serious eye irritation especially for the presence of xylene. Acute exposure to large quantities of sanding dust may irritate eye mucosa.

Chronic: There are not any available reports on the toxicity caused by the product.

INHALATION

Acute: Headache, nausea, dizziness, sleepiness and, if exposed to high concentrations, pneumonitis.

Chronic: Neuropsychiatric alterations reported for xylene. Xylene is also suspected of causing lesion to the auditive nerve.

INGESTION

Acute: Nausea, vomit, diarrhea. Risk of pneumonitis resulting from the ingestion of vomit.

Chronic: Hepatic damages related to ingestion of xylene.

ASPIRATION HAZARD:

Acute: When exposed to aromatic hydrocarbon for long periods, it may cause nausea, irritation of superior respiratory system, headache, vomit, dizziness, sleepiness and dermatitis.

Chronic: Possible neurological, renal, hearing damages when exposed for long periods, and lungs damages (cough, dyspnea, worse respiratory function) for inhaling the product vapors.

12 - ECOLOGICAL INFORMATION

ECOTOXICIDAD: Harmful to fauna and flora.

PERSISTENCE AND DEGRADABILITY: Product not degradable.

BIOACCUMULATION POTENTIAL: Not potentially Bioaccumulative.

MOBILITY IN SOIL: All actions shall be taken to work according to local environmental regulations.

ENVIRONMENT EFFECTS: Water insoluble. It may have toxic effects on water life. I may affect soil, by percolation, degrading the quality of the freatic level waters.

13 - TREATMENT AND DISPOSAL CONSIDERATIONS

RECOMMENDED PRACTICES FOR FINAL DESTINATION

PRODUCT: Co-processing, thermal decomposition or industrial earthwork, according to local regulations. Do not dispose of the material in sewerage systems, rivers, lakes and springs.

WASTE MATERIAL: the residue that will not be used anymore shall be disposed of according to local regulations.

USED CONTAINER: it shall not be used again.

14 - TRANSPORT INFORMATION

National and International Recommendation:

LAND:

UN Number: 1263

Hazard class: 3.0

Hazard number: 30

Packaging group: III

Proper shipping name: PAINT

WATERWAYS:

IMDG/GGVSEA/UN Number: 1263

Hazard class: 3.0

Hazard number: 30

Packaging group: III

Proper shipping name: PAINT

AIR TRANSPORT:

UN Number: 1263

Hazard class: 3.0

Hazard number: 30

Packaging group: III

Proper shipping name: PAINT

ENVIRONMENTAL HAZARD: In accordance with item 12.

15 - REGULATORY INFORMATION

Portaria n. 3214 of the Ministry of Labor and its Norma Regulamentadora n. 15 Annexes 11 and 12 (tolerance limits).

Norma Regulamentadora NR 7 - Biological Occupational Health Medical Control Program (biological indicators).

Resolution n. 5232, dated 12.14.2016, of the National Land Transport Agency.

IMDG (International Maritime Dangerous Goods Code), 1998 (Classification of Hazardous Products for Maritime Transport).

Dangerous Goods Regulations of the International Aerial Transport Association, 41 ed. (classification of dangerous products for air transport).

Norma Regulamentadora n. 26, of the Ministry of Labor.

Law no. 8078, of 09/09/1990 (Code of Defense of the Consumer). Directive 67/548 / EEC.

16 - OTHER INFORMATION

Bibliography:

ABNT NBR 14725-2

ABNT NBR 14725-3

ABNT NBR 14725-4

Abbreviations:

CAS: Chemical Abstracts Service

LC50 - Lethal concentration with 50% mortality

LD50 - Lethal dose with 50% mortality

LCLo - Lowest lethal concentration.

LDLo - Lowest letal dose

NA: Not available

NA: Not applicable

DEFINITIONS:

TERATOGENIC PRODUCT: In the case of chronic exposure may cause fetal abnormalities or threatened abortions.

MUTAGENIC PRODUCT: In the case of chronic exposure, can cause DNA changes.

PRODUCT CARCINOGENIC: In case of chronic exposure can be carcinogenic.

Note: the information contained herein is based on present experience and knowledge. We accept no responsibility if the information herein are not sufficient nor correct under all circumstances. Customers and users of this product shall consider these data as additional information on the ones they already have, to assure the product correct use and correct disposal of the material; safety and health of employees and customers, and environmental protection. The present MSDS refers exclusively to the described product, and it is not extensive to any other material or process. It is subject to change due to our policy of modification and product development. The information contained herein MSDS is based on documents issued by suppliers of the raw materials used in the preparation.