

**TDS 0645**

REVIEW: 03/2016

Standards: PETROBRAS N-1761 E  
USIMINAS NCU 0201**Rekotar ARA 231**Component A: 231.0990 (Black)  
and 231.0849 (Brown)  
Component B: 834.3600

Rekotar ARA 231 uses specially selected raw materials based on special epoxy coal tar polyamide-cure, showing excellent chemical and abrasion resistance, and a high resistance to cathodic protection. This is a high build, high solids and fast drying coating, which reduces substantially the time to release the painted area. Also, this is an ecological product, low volatile organic compounds (low VOC).

**TECHNICAL CHARACTERISTICS****TYPE**

Epoxy primer, two pack system

**USAGE**

As coating for carbon steel substrates, such as floors, wastewater treatment stations, pipe coating, immersed and plunged structures, concrete coating, pier poles, etc. It is also indicated for columns, coamings, offshore structures. Recommended for coating tanks with industrial water and sea water (internal and external).

**TECHNICAL INFORMATION**

<b>COLOR</b>	Brown and Black		
<b>FINISH</b>	Satin		
<b>VOLUME SOLIDS</b>	80% ± 2	According to ISO 3233	
<b>WEIGHT PER LITER</b>	1,480 ± 0,05 g/ml	According to ASTM D 1475	
<b>FLASH POINT</b>	32°C		
<b>MIXING RATIO</b>		Weight	Volume
	<b>Comp. A</b>	100,0	1,0
	<b>Comp. B</b>	117,4	1,0
<b>POT LIFE (25°C)</b>	7 h		
<b>INDUCTION TIME</b>	15 to 30 minutes		
<b>THEORETICAL SPREADING RATE</b>	4,4 m <sup>2</sup> /l - 180 µm 2,0 m <sup>2</sup> /l - 400 µm		
<b>WET THICKNESS</b>	225 µm to 500 µm		
<b>DRY THICKNESS</b>	180 µm to 400 µm		
<b>DRYING TIME, for 180 µm</b>	25°C		
		Minimum	Maximum
	<b>Touch</b>		5 h
	<b>Handle</b>		18 h
	<b>Recoat</b>	24 h	72 h
<b>ENVIRONMENTAL CONDITIONS</b>	<b>Temperature</b>	Should be between 5 to 52°C. For temperatures below 10°C, add 1,11% in volume of curing agent 870.0576.	
	<b>Relative Humidity</b>	Between 30 to 85%	
	<b>Dew Point</b>	Surface temperature is at least 3°C above dew point	
	<b>Thinner</b>	420.0000	
<b>APPLICATION</b>	<b>Brush</b>	It is not necessary dilution. This method must be used only for retouch and backing of welding cords and corners.	
	<b>Roller</b>	Dilute up to 20% (vol.) with recommended thinner. Must be used solvent resistant roller (sheep wool). The wool must be cutted (small size) to avoid blistering during the application.	
	<b>AirLess Spray Gun</b>	Dilute up to 20% (vol.) with recommended thinner. Use nozzles between 23 to 29 and pump pressure between 175 to 210 kgf/cm <sup>2</sup> (2500 to 3000 psi).	

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Blast cleaning ISO 8501-1 Sa 2 ½ (minimum) and mechanical treatment St 3 (for small areas). The surface must be dry, free of contaminants such as salt deposits, oil, grease, fat, dust and other kind of contaminants.

**Concrete**

It may be applied directly over concrete, if it is clean and free of contaminants, and provided it has been cured for at least 20 days. Abrasive blast or water jet to eliminate chalk, and/or wash it with an acid solution to reduce its alkalinity; let it dry, and apply the product. . For better performance and adhesion to the concrete, it is recommendable to apply one coat of Revran SEL 639.

**SURFACE PREPARATION****Aged Concrete**

If the concrete is aged, contact our Consultants

**Galvanized steel**

The surface must be dry, free of contaminants such as salt deposits, oil, grease, fat, dust and other kind of contaminants.

**Recommended Primers**

Revran SPN 520 and Revran SEL 639. For other primers, please contact our Consultants.

**Coated Surfaces**

The surface must be clean and free of contaminants as oils, fat, grease and dust. Must not present peeling's areas. Proceed light sanding (220) to break the gloss.

**Recommended TopCoat**

Not applicable

**SHELF LIFE**

12 months

**UN NUMBER**

1263

**HAZARD NUMBER**

33

**IMPORTANT RECOMMENDATIONS**

1. The practical spreading rate of the product varies according to the applied thickness, application method and techniques, type and rugosity of the surface and ambient conditions.
2. The weight/l, viscosity and drying values were obtained in laboratory at a temperature of 25°C. At an altered temperature, the results might be different from the specified ones.
3. Low temperatures increase drying time. Contact our Consultants for temperatures below 10°C.
4. Important: add curing agent to component A and homogenize, then mix components A and B for 5 minutes using mechanical agitator. Additivation is NOT recommended for immersion products. Additivation reduces pot life.
5. The film color might change if submitted to UV exposure and/or immersion, without modifying its anticorrosive properties.
6. Pot life is shortened by higher temperature, and by the increase of catalyzed volume.

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### SAFETY PRECAUTIONS

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1. Improper use and handling of this product can be hazardous to health and cause fire or explosion. Do not use it without first taking all appropriate measures to prevent property damage and injuries.
2. Storage: keep the product in sheltered, well-ventilated areas. Maximum temperature: 40° C. Must not be directly exposed to the sun.
3. Flammable: flammable product, which must be kept distant from ignition sources, and do not smoke nearby.
4. Inhalation: Avoid breathing vapors, keeping proper ventilation during application and drying.
5. Handling: wear proper protective clothing and masks, goggles, etc. Do not eat or drink nor allow children and animals to be near the application area.

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### HEALTH HAZARDS

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1. Skin contact: wash affected area thoroughly with neutral soap.
  2. Clothing contact: remove clothing and wash it.
  3. Leakage: Isolate the area, and do not smoke nearby. If large quantity leaked in confined area, wear protective masks. Do not inhale vapors. Stop leakage with sand, sawdust or soil, and transfer liquid and solid to separated recipients for disposal.
  4. Fire: protect non-affected recipients with water spray. Extinguish fire using carbon dioxide, foam or dry chemical.
  5. Eyes contact: flush eyes with large amounts of clean water for at least 10 minutes, and get medical attention immediately.
- IMPORTANT:** For further information consult the product MSDS (Material Safety Data Sheet).
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