

# Vulmproepox RD-TC system



# Product description:

Vulmproepox RD-TC system is a system of two-component coating materials based on water. It can be used as a base and topcoat for steel. It consists of component A (aqueous dispersion, epoxy resin containing additives, pigments and fillers) and component B (polyamide hardener).

#### Use:

It is used for coating of metal structures (also from light metals and alloys) as an anti-corrosion protection with a high degree of corrosion inhibition and as a protection against chemical and mechanical effects. Vulmproepox RD-TC system is recommended for surfaces in marine environments (salinity, category C-4), such as the interior of ships, steel structures, bridges, indoor walls and warehouse and factory premises, steel doors, chemical plants, swimming pools, shipyards and docks on the seashore

#### Benefits:

- resilient and hard surface
- high mechanical resistance
- extreme resistance to impacts and shocks
- good chemical and mechanical resistance
- resists penetration of liquids
- adhesive even to a slightly greasy surface
- possibility to achieve a greater thickness in one coating

# Test data:

TSÚS 353/2005 STN EN ISO 6270-1 (67 2012)

STN EN ISO 2808 (67 3061) STN EN 2409 (67 3085) STN EN ISO 7253 (67 3092)

- corrosion in the cross-section by a method according to Annex A, STN EN ISO 12944-6
- Test Report no. 90-08-0247

### Product data:

colour: RAL, MIPA according to customer's choice

appearance: matte, semi-gloss

shelf life: 12 months in original packaging in dry conditions

at the temperature 10 - 35 °C

limit VOC: according to Ministry of Environment Decree no.127/2011 Coll.: 200 g/l

measured value: 12,4 g/l

# Physical data:

binder content: 20 % solids content: 65 % water content: 15 % flow: 15,9 cm



hardness: after 24 hours 60 Shore D

 3 days
 70 Shore D

 7 days
 78 Shore D

 28 days
 82 Shore D

at a relative air humidity of 65 % and temperature of 20 °C

abrasion resistance: 156 md/1000 cycles

handling time: 45 minutes

density:

component A: 2,37 g/ml component B: 1,08 g/ml component A + B: 2,07 g/ml

## Processing temperature:

minimum temperature of the substrate: 5 °C maximum temperature of the substrate: 30 °C ideal temperature for processing: 20 °C maximum relative air humidity: 85 %

## Theoretical capacity:

 $6.7 - 10 \text{ m}^2/\text{kg}$  1x coating thickness 80 µm  $2.2 - 3.3 \text{ m}^2/\text{kg}$  2 - 3x coating thickness 250 µm

# Application methods:

roller, brush, spray

#### Instructions for use:

#### Primer

Mixture of components A and B of primer coating is in a ratio of 10:1.4 (by weight -1 kg of component A and 0.14 kg of component B). Mixing of the reactive components takes 2-3 minutes, but ends after achieving a homogeneous mixture. Viscosity is adjusted by the addition of water (max. 10-15 %). The prepared material is applied by brush, roller or spray, independently of the thickness of layer. The material should be applied within 45 minutes after mixing, since afterwards it begins to solidify. The primer is applied in one or two layers (if necessary). After 2-5 hours, we can apply a second coat.

#### Top coat

Mixture of components A and B of top coating is in a ratio of 10:2 (by weight -1 kg of component A and 0.2 kg of component B). Mixing of the reactive components takes 2-3 minutes, but ends after achieving a homogeneous mixture. Viscosity is adjusted by the addition of water (max. 10-15%). The prepared material is applied by brush, roller or spray, independently of the thickness of layer. The material should be applied within 45 minutes after mixing, since afterwards it begins to solidify. The coating is applied in a single layer.

# Substrate:

The substrate must be sufficiently coherent and supporting. Surface must be flat, solid, free of dirt and loose particles. The coating can be applied on slightly oily surfaces. Surface must be dusted and without rough particles, preferably cleaned by pressurized water. Degreasing is not necessary.

# Time data for application:

Processability of the mixed material: approx. 45 minutes
Dry to touch and re-coating interval: approx. 2 – 4 hodiny

walkable: 24 hours fully loadable: 65 hours at a relative air humidity of 65 % and temperature of 20 °C

# Cleaning of tools:

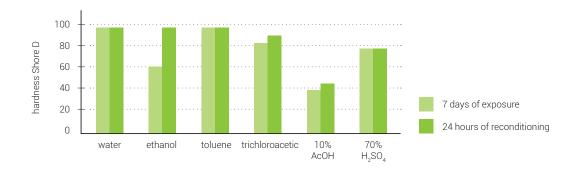
Immediately after use, with water.



#### Resistance:

- withstands high mechanical loads
- resistant to chemicals, solvents, detergents and cleaners
- resistant to heat of up to 140 °C (short-term), does not change characteristics at 100 °C
- corrosion resistant (category C3 (long durability) and C4 (medium durability))

# Chemical resistance:



# Safety:

**Vulmproepox RD-TC system** – when handling, proceed in accordance with the general safety measures, follow the safety instructions on the packaging labels and on safety data sheets. Data, specifications, directions and recommendations given in this technical data sheet are based on experience gained in modeling of supposed ways of applications, or under specially defined conditions. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by the user. The manufacturer and distributor are not responsible for the results achieved, loss, direct or consequential damages arising from failure to comply with the recommended use of the product, which go beyond the conditions herein.



#### Tests:

Property	Rule for determining compliance	Determined comparative value	Test report identification
Release of pollutants into the environment (V)	Ministry of Envir. Decree no. 515/2001 Coll.	Safety Data Sheet	Safety Data Sheet
Corrosion resistance	STN EN ISO 12944 - 6	C4 — high durability	Test Report no. 90 – 08 – 0247, TSÚS, branch Tatranská Štrba, 24.10.2008
Cross-cut adhesion	STN EN ISO 12944 - 6	Level 0-1	Test Report no. 90 – 08 – 0247, TSÚS, branch Tatranská Štrba, 24.10.2008

Note: Properties, which – in accordance with the technical specifications – may be tested only by a competent authorized person, are indicated by the symbol (AO).

More details are given in the Test Report no. 90-08-0247, tests: corrosion resistance, cross-cut adhesion, TSÚS n.o., branch Tatranská Štrba, 24.10.2008