

2 component, waterproof, elastic, hot sprayed polyurea membrane with excellent mechanical properties.



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EN 1504-2

Surface protection product  
Coating

## APPLICATION

Protection for concrete, steel and wood, against wear, abrasion, corrosion and chemicals. Waterproofing membrane for concrete structures and roofs. UREASPRAY 400 can be used for applications with potable water. After the application of UREASPRAY 400 a waiting time of 24 hours has to be taken. Afterwards the substrate that has been treated with UREASPRAY 400 needs to be washed and rinsed thoroughly with warm water (50-60°C). This water needs to be removed. Additionally, an extra waiting time of 72 hours needs to be taken into account before the substrate comes in contact with potable water. Waterproofing and coating of surfaces such as:

- Interiors and exteriors of steel and concrete ponds.
- Tunnels (coating or waterproofing, Cut and Cover method and immersed tunnel segments).
- Primary and secondary containment of fluids (parapets).
- Ponds and tanks in general.
- Pools in industrial processes.
- Reservoirs, viaducts and irrigation canals.
- Bridge pillars and decks.
- Waterproofing of roofs for industrial warehouses.
- Subway stations (ceiling and floor).
- Sealing of joints (prefabricated elements).
- Bonding of walls, floors and expansion joints.
- Cellars and refrigeration tunnels.
- Vehicles, boat decks, industrial parts subject to wear.
- Repair of concrete and substrates in general.
- Surfaces subject to abrasion...
- Barrier to prevent root penetration.

## ADVANTAGES

- Easy and fast application with machine.
- High abrasion and wear resistance.
- High elongation.
- High shock and impact resistance.
- High resistance to corrosion and chemical attack.
- Continuous waterproofing membrane.
- Ultra-rapid reactivity (seconds).
- Excellent adhesion to metal, concrete and foam.
- 3 - dimensional application.
- No risk to environment.
- VOC and solvent free.
- Bacteriologically stable...
- Excellent resistance to saline water.

## USAGE

± 1,05 kg/mm<sup>2</sup> (standard thickness for application is 2 mm).

## APPLICATION PRESCRIPTIONS

- **Preparation**  
Adequate surface preparation is mandatory for success. Thoroughly clean the surface in order to have a good adhesion. All dust, grease, paint and loose particles are to be removed. Apply UREASPRAY 400 only on dry and clean surfaces.
- **Primers**  
For metals: UREAPRIM METAL.  
For concrete: UREAPRIM CONCRETE.
- **UREASPRAY 400**  
UREASPRAY 400 is hot sprayed with a 2 component high pressure reactor (type Graco EXP2). This spray coating has a very short reaction time and can be applied 3 dimensionally in layers with thickness from 1 mm to 5 mm.
- **Topcoat**  
For protection against UV and surface discoloration use UREATOP SW, a high quality elastic aliphatic topcoat.
- **Accessories**  
UREA GUNCLEANER.
- **Important**  
UREASPRAY 400 can only be used by fully trained professional applicators. Consult or network.  
For all applications consult our general Method Statement or our technical staff.

## TECHNICAL DATA

Mix ratio	1:1 (volume)
Volatile Organic Compounds - VOC (g/l)	0
Viscosity (CPS) comp A/ comp B	800 / 750
Service temperature (°C)	-20 to 85
Max. temperature for occasional use (°C)	150
Density (g/cc)	1,077
Gel time (sec)	5
Walkable (min)	5
Full cure 100% (h)	24
Tensile strength (MPa) (NBN EN 12311-2)	21
Elongation (%) (NBN EN 12311-2)	345 - 400
Shore A hardness	92
Shore D hardness	45
Abrasion resistance mg lost, Taber method, (1,000 g/ 1,000 cycles), CS-10	< 26
Adhesion to concrete (dry)	≥ 4,03 N/mm <sup>2</sup>
Adhesion to concrete (wet)	≥ 3,06 N/mm <sup>2</sup>
Pull off test	NBN EN 1542
Crack bridging (NBN EN 1062-7)	> 9 mm
Capillary absorption (mg/(m <sup>2</sup> .h <sup>0.5</sup> ))	< 13
Water vapour permeability (EN ISO 7783)	Class II (< 2.5 g/day/ m <sup>2</sup> )
UV resistance - 500 h (50°C, 50 W/m <sup>2</sup> )	Compliant
Atmospheric humidity during application	15 - 90 %
Peeling (N/mm <sup>2</sup> )	70
Shear strength (N/mm <sup>2</sup> )	40

**STORAGE**

12 months in original packaging. Keep original drums tightly closed to prevent contamination by humidity. Store in clean and dry place between 10°C and 30°C.

**CERTIFICATION FOR POTABLE WATER**

Compliance with the requirement of the Standard SI 5452- Testing of products in contact with drinking water, from April 2012.

The test conducted according to the applicability of the Australian-New-Zealand standard AS/NZS 4020:2005, as well as clause 4 of the British standard BS 6920-2014.

**PACKAGING**

- Set of 120 kg (60kg comp. A (amine) + 60kg comp. B (ISO))
- Set of 450 kg (225kg comp. A (amine) + 225kg comp. B (ISO))

**SAFETY AND HEALTH PRECAUTIONS**

For more information, consult the safety data sheet.