



المعلومات الفنية
TECHNICAL DATA SHEET

RAKAM
POLYURETHANE TOPCOAT

PRODUCT CODE: RAKAM - 809

DESCRIPTION

Rakam Polyurethane Topcoat is a two component, acrylic aliphatic polyurethane finish. It is formulated with special gloss and color stable binder along with durable pigments. It produces an attractive exterior durable finish.

TECHNICAL DATA

- Specific gravity : Approx. 1.14 g/cc
- Sold by volume : 47 ± 2 % (ASTM D 2697)
- Theoretical spreading : 10 m²/L
- Dry film thickness : 40 microns
- Wet film thickness : 85 microns
- Flash point : 20°C (ASTM D 3278)
- Finish : gloss, semi glossy and matt
- VOC : < 450 g/L (ASTMD 3960)

APPLICATION DATA

Surface preparation: Coated substrates:
All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. Ensure compatibility of the coated substrates with the selected paint system. If the remaining part of the existing coating system needs to be sweep-blasted, fine abrasive shall be used to avoid damage to the coating system. When recoating aged coated substrates, damaged areas must be removed back to a firm edge. Light abrade or sweep-blast the surface in order to provide a physical key for adhesion.
Minor repair/Touch up:
All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. Any corroded areas should be prepared by power-tool cleaning .Clean-

ing to min. St 2, preferably St 3 (ISO 8501- 1:2007). Care shall be taken to ensure that power-tool cleaning does not polish the steel surface. If the surface being prepared lies adjacent to a coated surface, the power tool cleaning shall overlap the coated surface by at least 25 mm and the coated surface shall be feathered.

Typical coating system
Primer : RAKAM Guard Epoxy Red oxide Primer : 50 µ
Topcoat: RAKAM POLYURETHANE Topcoat : 50 µ
Application method : Brush/ Roller
Applicable for inaccessible area, corners and edges.
Multiple coat may be required for desired film thickness.

- Volume of thinner : 5%
- Mixing ratio : By volume, Base to Hardener 4:1
- Airless spray : Pressure at nozzle : 2000 - 2200 psi
Nozzle size: 0.013 - 0.017 inch
Spray angle: 40 - 80°
Volume of thinner 5 - 10%
- Air assisted gun : Pressure at nozzle : 35 - 50 psi
Nozzle size : 1.8 - 2.2mm
Spray angle: 40 - 80°
Volume of thinner 10 - 15%

- Conditions:
- Humidity : Below 85% RH
- Temperature of the substrate should be at least 3°C above the dew point of the air.
- Application temperature Min: 10°C, Maxi: 45°C
- Thinner/Cleaner : Rakam Polyurethane Thinner
- Pot life : 4 Hours At 30°C
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|-----------|------|------|-------|----------|-------|
| Packaging | 3.6L | Base | 2.88L | Hardener | 0.72L |
| Pack size | 18L | | 14.4L | | 3.6L |



CURING TIME

- Touch Dry : 16 hours @ 10°C
: 8 hours @ 20°C
: 3 hours @ 30°C
: 2 hours @ 40°C
- Dry to handle : 48 hours @ 10°C
: 32 hours @ 20°C
: 24 hours @ 30°C
: 16 hours @ 40°C
- Recoat interval Min : 48 hours @ 10°C
Max : Indefinite* @ 10°C
Min : 32 hours @ 20°C
Max : Indefinite* @ 20°C
Min : 24 hours @ 30°C
Max : Indefinite* @ 30°C
Min : 20 hours @ 40°C
Max : Indefinite* @ 40°C

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product and should be considered as guidelines only. The actual drying time/times may be shorter or longer, depending on film thickness, temperature, ventilation, humidity, preceding paint system etc.

*The surface should be dry and free from contaminants prior to over coating. The best intercoat adhesion is achieved when the subsequent coat is applied before the preceding coat is fully cured. When recoating with products, maximum recoat interval is limited. After prolonged exposure it may be necessary to roughen the surface to ensure intercoat adhesion. When in doubt, consult RAKAM LLC representative.

HEALTH & SAFETY

Avoid skin and eye contact by wearing overalls, gloves, goggles, and mask etc.
Eyes: In the event of accidental splash, flush eye with water immediately and obtain medical advice.
Skin: Wash skin thoroughly with soap and water or medically approved cleaner.
Avoid inhalation of vapors and paint mist by wearing suitable mask. In the event of ingestion seek medical attention immediately.
This product is flammable, keep away from sources of ignition. Take precautionary measures against static discharge. In the case of fire – blanket flames with foam, carbon dioxide or dry chemicals. Painting must be carried out in well-ventilated area. Local safety regulation need to be followed.

HANDLING AND STORAGE

Product must be stored according to local regulations and manufacturer recommendation. Recommended to store at 30°C, away from direct sunlight, heat, source of ignition and exposure to water or rain, within a well-ventilated place.
Shelf life@ 14 months in original sealed drums from the date of manufacture when stored at or below 30°C.

ADVANTAGES & RECOMMENDED USES

As a topcoat for the exterior of chemical storage tanks, pipelines and variety of intumescent coats. It can be applied as a topcoat over epoxy, polyester, polyurethane or similar two pack primers and suitable for application on structural steel, concrete, onshore and offshore facilities. It has long term recoatable properties. It has excellent gloss and color retention. It is resistance to large number of mild chemicals and water.