CORROSION COUPONS

88.5% REDUCTION OF CORROSION RATE

ODYSSEE FRENCH FILMING AMINES protect the metals from corrosion even in highly corrosive environments.

INITIAL CONDITIONS

Steel coupon untreated before immersion.

Steel coupon coated by FFAs before immersion.

5% of hydrochloric acid solution before coupon immersion.

TEST RESULTS

TRIAL WITH UNTREATED COUPON:

Corrosion of steel without protection.

Hydrochloric acid solution from colorless to pale green.

Corrosion rate after 2 hours of immersion: 4.488 mils/year.

After 2 hours: corroded coupon

TRIAL WITH COUPON COATED BY ODYTHERM FS 500R

No corrosion of steel with ODYTHERM FS 500R protection.

Hydrochloric acid solution stays colorless.

Corrosion rate after 2 hours of immersion: 0.512 mils/year.

After 2 hours: protected and non-corroded coupon

PROTOCOL

Immersion of untreated and treated coupons in a very corrosive heated solution.

Observation and measurement of corrosion rate.

SOLUTION

Hydrochloric acid 5% + City Water

TEMPERATURE

176 F (80°C)

TEST DURATION

2 hours