Ritecoat 2200

Summary of Laboratory Test Data

1. GENERAL / MECHANICAL

Substrate: tin plate, Pyrene brand standard test panels.

- Gloss	BS 3900, Part D2	Pass
- Bend	BS 3900, Part E1	Pass
- Impact Indent	BS 3900, Part E3	Pass
- Cross Hatch	- -	Pass
- Adhesion (tape test)	- -	Pass

2. ABRASION AND SCRATCH RESISTANCE

Substrate: tin plate, Pyrene brand standard test panels.

- Taber Wear Index, Wheels CS17 Load 1000 GRM	BS AU148, Part 4	Pass
- Scratch	BS 3900, Part E1	Pass

3. HUMIDITY / WEATHERING

Substrate: tin plate, Pyrene brand standard test panels.

- Humidity (240 hours)	BS 3900, Part F2	Pass
- Accelerated Weathering (1000 hours)	BS 3900, Part F3	Pass

4. SALT SPRAY RESISTANCE

a) Substrate: steel plate, grit blasted to Swedish Standard S.A. 2.5

- Salt spray	ASTM D-1654-61	Pass

b) Substrate: tin plate, Pyrene brand standard test panels

- Salt Spray (1000 hours)	BS 3900, Part F4	Pass

Summary of Laboratory Test Data

5. ACID RESISTANCE

a) Substrate: tin plate, Pyrene brand standard test panels

- Resistance to Acid Water	(12 weeks immersion)	BS 3900, Part G5	Pass
- Resistance to HF Acid 5%	(7 days immersion)	BS 3900, Part G5	Pass

b) Substrate: tin plate, Pyrene brand standard test panels

Test method: total immersion for sixty (60) days, 23 deg°C.

Surface Changes

- Acetic	10%	blistering	30 days
- Formic	10%	destruction	30 days
- Hydrochloric	10%	none	
- Hydrochloric	20%	blistering	30 days
- Nitric	10%	blistering	30 days
- Sulphuric	10%	none	
- Sulphuric	50%	none	

PLEASE NOTE: Most coatings are susceptible to blistering or surface destruction by the above acids within several days, under conditions of total immersion and elevated temperature.

c) Substrate: steel plate, grit blasted to Swedish Standard S.A. 2.5

Test method: total immersion until minor surface attack observed visually.

- Acetic	100%		40 days
- Hydrochloric	37%	140 days	
- Nitric	20%		40 days
- Sulphuric	50%		250 days

Summary of Laboratory Test Data

6. RESISTANCE TO BASES/ALKALIS

a)Substrate: tin plate, Pyrene brand standard test panels

Test method: total immersion for sixty (60) days, 23 deg°C.

		Surface Changes	
- Ammonia	10%	blistering	30 days
- Hydrogen peroxide	10%	blistering	30 days
- Soda solution, saturated (45 deg°C)		none	
- Sodium hydroxide	20%	none	
- Sodium hydroxide (50 deg°C)	20%	none	

PLEASE NOTE: Most coatings are susceptible to blistering or surface destruction by the above alkalis within several days, under conditions of total immersion and elevated temperature.

b) Substrate: steel plate, grit blasted to Swedish Standard S.A. 2.5

Test method: Total immersion until minor surface attack observed visually.

- Sodium hydroxide 50% 720 days

7. SOLVENT RESISTANCE

a) Test panels: tin plate, Pyrene brand standard panels

Method: Total immersion for sixty (60) days, 23 deg°C.

	Surface Changes	
- Methanol	softening	20 days
- Methyl Isobutyl Ketone	softening	60 days
- Toluene	none	
- White Spirit	none	
- Xylene	none	

PLEASE NOTE: Most coatings are susceptible to softening of the surface film by the above solvents within several days, under conditions of total immersion and elevated temperature.

Summary of Laboratory Test Data

b) Substrate: steel plate, grit blasted to Swedish Standard S.A. 2.5

Test method: total immersion until minor surface attack observed visually.

- Cellosolve Acetate	720 days
- Methyl Ethyl Ketone (MEK)	30 days

8. RESISTANCE TO OTHER LIQUIDS

a) Substrate: tin plate, Pyrene brand standard test panels

Test method: BS 3900, Part G5.

- Non-Saline Water (12 weeks immersion)	Pass
- Saline Water (12 weeks immersion)	Pass
- Diesel Oil (7 days immersion)	Pass
- Mineral Oil (7 days immersion)	Pass

b) Substrate: tin plate, Pyrene brand standard test panels

Test method: total immersion for sixty (60) days, 23 deg°C.

	Surface Changes
- Distilled water	none
- Fuel oil + 10% water (50 deg°)	none

NOTE: The tests in this Summary were carried out on RITECOAT 2200 applied in one or two coats to a thickness of 50 microns or less.