# **RWIP120 Epoxy Coating and** Maintenance System.



Indestructible specialist coatings manufacture

**Product Description** 

High Performance Protective Coating System Developed for Rail Rollingstock–Underframe Equipment and Components.

### RWIP120 Epoxy Coating and Maintenance System





Indestructible Paints Ltd have long been established as a UK manufacturer of high-performance protective coating systems for supply into the aerospace and land defence industries, utilising the latest polymer technology. Indestructible Paint Ltd have been adopting this technology for use within the passenger and freight rail sectors, including underground vehicles, offering excellent corrosion protection in aggressive operating conditions, extending the operating life for its customers assets.

The first fully compliant product from Indestructible Paint Ltd for use on underframe components is a high solid solvent-based epoxy product, RWIP120, applied as a single coat application direct to substrate or 2 coat application, primer, and finish, which can be overcoated with itself and other Indestructible Paint finishes, epoxy, and polyurethanes. RWIP120 is part of a family of coatings developed by Indestructible Paint, manufactured from a high grade 2-part epoxy system initially procured for use in aerospace applications. Indestructible have subsequently taken this resin binder system to manufacture a range of low VOC coatings intended for Rail, Industrial, Transport and Architectural applications. These coatings are ideally suited for use on underframe components including bogies, wheelsets, motors, fluid or air receivers, control enclosures, support structures, etc. The composition of the epoxy and its chemical bonding properties allows use on a range of substrates including ferrous and non-ferrous metals, GRP mouldings and a wide range of composites. The cured coating is a tough chemically resilient finish that has been tested against a variety of corporate and national standards including CR/PE0102 and EN45545-2 for Fire Smoke and Toxicity.

#### After 7 days air curing or force curing for 30 minutes at 125°C, the coating will pass:

- Heat resistance: 48 hours at 204°C (400°F)
- Heat resistance: 100 hours at 180°C (356°F)
- Hot oil immersion: 8 hours in ASTM Fluid 101 (ASTM D 471) at 177°C (350°F)
- showing no peeling / softening
- Hot lube oil immersion: 100 hours at 150°C (302°F)
- Fuel resistance: immersion in ASTM ref fuel B for 4 hours at room temperature without peeling / softening
- Fuel resistance: room temperature immersion 100 hours
- Corrosion resistance: after exposure to heat (48 hours at 400°F) cross scratched X withstands 350 hours salt spray ASTM B117
- Heat Salt Fog Resistant to 10 cycles: each cycle, 4 hours at 250°C (300°F) then 20 hours salt fog
- Resistant to temperatures down to -50°C

## Engineered Coatings and Coatings for Rail Engineering





### RWIP120 - Benefits.

2 component high solids aerospace grade epoxy coating.

Proven long term corrosion protection.

Excellent fire performance properties.

Good resistance to abrasion and mechanical damage.

Applied directly to range of substrates including Steel, Stainless Steel, Aluminium, Galv, GRP and Composites. Outstanding resistance to immersion in aqueous solutions and a wide range of chemicals.

Excellent resistant to dry heat-100 hours at 180 deg.C. and hot oil immersion.

Single coat system applied direct to substrate at 80 – 120 microns dft. (finish semi-gloss).

2-coat system, primer matt at 40 – 60 microns dft, finish coat at 40 – 60 microns dft (finish matt to full gloss).

Available in a range of BS. and RAL colours and gloss levels from matt to full gloss

## RWIP120 Epoxy Coating and Maintenance System



		EN45545-2 R	1 Steel Sub	strate Res	ults			
Test Method		EN455452 R1 Requirements				Test Report		Hazzard Level
								Classification
Test	Parameter		HL1	HL2	HL3	Number.	Results.	
TO2 ISO 5658-2	CFE kWm-2	minimum	20	20	20	ICL/ H19/11850	41.92	HL1 / HL2 / HL3.
TO3.01 ISO 5660-1	MARHE kWm-2	maximum		90	60	ICL/ H19/11851	3.5	
T10.01 EN ISO 5659- 2 50 kWm-2	Ds(4) dimensionless	maximum	600	300	150	HCL/ H19/11852	28.25	
T10.02 EN ISO 5659- 2 50 kWm-2	VOF4 min	maximum	12000	600	300	HCL/ H19/11852	63.96	
T11.01 EN ISO 5659- 2 50 kWm-2	CITG dimensionless	maximum	1.2	0.9	0.75	HCL/ H19/11853	0.007 (4min) 0.001 (8min)	
		EN45545-2 R	7 Steel Sub	strate Res	ults			
Test Method		EN45545-2 R7 Requirements				Test Report		Hazzard Level
							Classification.	
Test	Parameter		HL1	HL2	HL3	Number	Results	
TO2 ISO 5658-2	CFE kWm-2	minimum	20	20	20	ICL/ H19/11850	41.92	HL1 / HL2 / HL3.
TO3.01 ISO 5660-1 50 kWm-2	MARHE kWm-2	maximum	a /	90	60	ICL/ H19/11851	3.5	
T10.04 EN ISO 5659-2 50 kWm-2	DS Max dimensionless	maximum	/	600	300	ICL/ H19/11852	38.1	
T11.01 EN ISO 5659-2 50 kWm-2	CITG dimensionless	maximum	/	1.8	1.5	ICL/ H19/11853	0.007 (4 min) 0.010 (8 min)	

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#### Before use, refer to Product Safety Data Sheet.

Safety Data Sheets:

For Safety Data Sheets please contact our Sales Department: Tel: +44(0)121 702 2485 / Email: sales@indestructible.co.uk

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