



650 RANGE - HIGH TEMPERATURE MARKING PAINTS

IP CODE NUMBER: PL149 / PL150 / PL151R1 / PL152/R1 / PL153 / PL155R1 / PL167R1 / PL168R1 / IP9091
/ 66 Clear Primer

PRODUCT DESCRIPTION

Inorganic paints suitable for marking and coating high temperature steels. Resistant in some colours to 800°C, fuels, oils and lubricants, including Skydrol. Recently re-formulated, these products have been made more sprayable, and therefore useable. Similar to Sermetel 406 - 413 range
Red and orange still contain a Safe cadmium pigment.

APPROVALS / REFERENCES / SPECS

MSRR 9041 - (Spraying). MSRR 9285 - Brushing grade has recently been withdrawn and any of the listed products can be brushed. Up to 10% water can be added to make the product more easily sprayable. Similar to Allied Signal spec MCS 9055K.

	Colour	RR Code	OMAT	Similar to	
IP9091	Clear Primer 66				
PL149	White	138023	7/110A	Sermetel	739
PL150	Green	138024	7/110B	"	413
PL151R1	Blue	138025	7/110F	"	412
PL152R1	Black	138026	7/110C	"	409
PL153	Grey	138027	7/110D	"	411
PL155R1	Orange	138028	7/110E	"	406
PL167R1	Red	138016	7/110G	"	407
PL168R1	Yellow	138128	7/84	"	1465

PERFORMANCE

Resistant to skydrol and other aggressive chemicals, solvents and liquids. Standard test 100 hours at 650°C, but has been used up to 800°C. White is only spec'd to 450°C, at which temperature it starts to turn a light grey. Orange and Red are now only spec'd to 500°C

APPLICATION

IP9091 Clear Primer 66 can be used to aid adhesion of coloured topcoat. Apply by spray or brush (as per grade) to a perfectly clean and preferably shot blasted surface. Allow to dry, material is touch dry in 20 minutes, but should not be subjected to heat for 48 hours if being used as an air drying material. An engine run will then 'fix' the material. However unless the material has been subjected to heat in excess of 150°C (300°F) it may wash off if subjected to weathering. Alternatively, air dry for 1 hour, then stove at 150°C (300°F) for a minimum of 30 minutes. Apply for RPS 661/28.

PHYSICAL PROPERTIES

Mixing Ratio	One part product
Thinner	Wash Guns and Brushes in Water
Supply Viscosity	Ready for use
Colour	As listed or by negotiation.
Gloss Level	Semi Matt, Eggshell, but can be polished
Film Thickness	15 Microns
Flash Point / Class / UN No	
Pack Size	500ml plastic containers
Shelf Life	12 months



650 RANGE OF HIGH HEAT RESISTANT PAINTS

IP CODE NUMBER: High heat - Black (other colours available)

PRODUCT DESCRIPTION

As a result of our work manufacturing coatings for aeroengine manufacturers such as Rolls Royce and Pratt and Whitney, we have access to a wide range of unusual, if not unique coatings paints and fillers with high temperature and chemical resistance. We have made a range of high temperature coloured marking paints for Rolls for more than twenty years that are routinely tested for 1000 hours at 650°C, are resistant to most chemicals, and contain no solvents at all. However, they were difficult to apply in large areas, and some of the brighter colours contained cadmium pigments, (specifically red and yellow.)

As a result of Smart grant development, this range has been newly developed and is being marketed as a range of specialised coatings suitable for coating high temperature substrates including steel. Resistant to 800°C, fuels, oils, and lubricants including Skydrol. Sprayable onto freshly sand blasted steels etc, these products need to be treated not as traditional solvent based paints, but as a new technology similar to, but not necessarily identical to, paint. A catalyst can be provided to enhance sprayability, or to make it air dry, or to make it brushable. Surface finish when applied tends to be eggshell, but we are unable to deliberately change this at the moment. Pigments that work at these very high temperatures are rare, and we are therefore limited with our colours. We also currently have no experience of trying to mix these pigments, and therefore can only currently provide coatings of the same colour as the pigment. As these products are still in the development stage, we are still in the throes of finalising the formulae, and if any problems at all are experienced with them, we would be more than happy to know so that they can be resolved.

PERFORMANCE

Resists 100 hours continuously at 650°C

Has been run for times at 800°C

Very resistant to a wide range of chemicals

Resists exposure to naked flames for a time, has no noxious fumes when so exposed.

APPLICATION

On normal mild steel, good degreasing followed by shotblasting should be adequate, followed by 20 minutes to half an hour flash off. Stove at 180°C for 30 minutes. As this is a water based product, cold and humid conditions affect the wet coatings ability to dry.

PHYSICAL PROPERTIES

Mixing Ratio	Depends on requirement
Thinner	Water
Supply Viscosity	Ready for use
Colour	Black, White, (tends to go grey if running for long periods over 400°C), Bright Blue, Billiard table green, Khaki, Brick red, Yellow. Cadmium containing bright red and orange-yellow.
Gloss Level	Semi Gloss normally but not guaranteed
Film Thickness	12 -20 microns per coat
Flash Point / Class / UN No	Not flammable
Pack Size	0.5 litre containers
Shelf Life	12 months