

Coating System for Transformer & Radiator As per ISO 12944.



Power transformer is one of the most important and expensive capital equipment in a distribution network, it is strategic and vitally important to maintain the assets correctly to keep them at optimum performance and extend their service life.

Transformers are exposed to different climatic conditions right from moderate corrosivity in rural areas to extreme corrosive conditions in industrial and coastal regions. Their service life depends upon the type of coatings selected to protect them against corrosion.

Marigold High performance Epoxy and Polyurethane coatings are designed to protect these assets of vital importance in most adverse climatic conditions.

Transformer & Radiator Coating System.

Depending upon corrosivity Two or Three-layer Paint system can be used on Transformers to protect against corrosion and maintain aesthetics when exposed to sunlight. DFT of Paint system is specified depending upon degree of corrosion.

1- TWO Coat System- Maripoxy HS 800/Maripoxy ZP 650 Primer + Marithane 500 PU Topcoat.

2- Three Coat System- Maripoxy Zinc Rich Primer + Maripoxy HPHS 850 High Performance High Build Coating + Marithane HPHS 670/Marithane 550 High Performance Polyurethane Topcoat.

As far Radiators are concerned the most common system is-

Epoxy Primer - Maripoxy ZP 650 Epoxy Zinc Phosphate Primer, applied by flooding/Flow

PU/Alkyd Topcoat-Marithane 550/500 Polyurethane OR Marigold HP Synthetic Enamel applied by spray.

PU Coatings give much better performance than alkyd topcoat in system.



Marigold Paints Pvt Ltd

Introduction

Marigold Paint was founded as a proprietary unit in 1976. The company was converted into Private limited company in year 1986.

The company in initial stage was manufacturing Paints to cater to the needs of Engineering Industry. Over a period, it ventured into different segments of Paints and Coatings industry. Currently Marigold has presence in General Industrial, Decorative (solvent based only), Auto Refinish, Wood Coatings, Steel Furniture, and Protective coatings segments.

Marigold Paints' Headquarter, Manufacturing facility and R&D Lab is in Vallabh Udyog Nagar at Anand in Gujarat. Marigold has pan India presence with ten Sales Offices and warehouses across the country.

Marigold Paints offers wide range of high-performance coatings which protect the installations in most corrosive environment. Our Protective coatings meet stringent specifications of Oil & Gas Industry, Power generation, Infrastructure and Heavy-Duty Equipment.

Marigold Paints remains committed to create value for its customer through consistent quality and supply services. Our High Solid and faster drying products improve our customers' productivity. We remain focused on developing new products that offer higher performance with least impact on the environment.

Considering the adverse climatic conditions to which Transformer and Radiators are exposed, we have developed special coatings to protect these incredibly important assets and extend their service life.

Corrosion Category

CATEGORY	EXTERNAL	INTERNAL
C-1	NOT APPLICABLE	HOUSES AND OFFICES
C-2	LOW POLLUTION ENVIRONMENT- RURAL AREA	UNHEATED BUILDINGS WHERE CONDENSATION CAN OCCUR LIKE STORAGE WAREHOUSES ETC.
C-3	INDUSTRIAL AND URBAN ATMOSPHERE LOW POLLUTION AND LOW SALINITY COASTAL ENVIRONMENT	PRODUCTION ROOMS WITH HIGH HUMIDITY AND SOME AIR POLLUTION LIKE FOOD PROCESSING AND DAIRY PLANTS.
C-4	INDUSTRIAL AND COASTAL AREAS WITH MODERATE SALINITY	MILD CORROSIVE ENVIRONMENT LIKE CHEMICAL PLANTS
C-5	INDUSTRIAL AREA WITH HIGH HUMIDITY AND AGGRESSIVE ATMOSPHERE AND COASTAL AREA WITH HIGH SALINITY	BUILDINGS WITH ALMOST PERMANENT HIGH CONDENSATION AND HIGH POLLUTION.

TRANSFORMER & RADIATOR COATING SYSTEM

ISO 12944 SELECTION GUIDE

C2 Corrosive category

Durability: High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy ZP 650	70	-	Marithane series	50	1	120
2	EP	Maripoxy 800 HS	80	PUR	Marithane series	50	2	130

Durability: Very High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 800 HS	120	PUR	Marithane series	60	2	180

C3 Corrosive category

Durability: Medium

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy ZP 650	70	-	Marithane Series	50	1	120
2	EP	Maripoxy 800 HS	80	PUR	Marithane series	50	2	130

Durability: High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	120	PUR	Marithane series	60	2	180

Durability: Very High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	180	PUR	Marithane series	60	2	240

C4 Corrosive category

Durability: Medium

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850	120	PUR	Marithane series	60	2	180

Durability: High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	180	PUR	Marithane series	60	2	240

Durability: Very High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
2	EP	Maripoxy 850	240	PUR	Marithane series	60	2	300

C5 Corrosive category

Durability: Low

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	120	PUR	Marithane series	60	2	180

Durability: Medium

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	180	PUR	Marithane series	60	2	240

Durability: High

System no	1st Coat			2nd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	240	PUR	Marithane series	60	2	300

Durability: Very High

System no	1st Coat			2nd Coat			3rd Coat			No. of Coat	System DFT (µm)
	Type	Product	DFT (µm)	Type	Product	DFT (µm)	Type	Product	DFT (µm)		
1	EP	Maripoxy 850 HPHS	150	EP	Maripoxy 850 HPHS	150	PUR	Marithane series	60	3	360
2	EP	Maripoxy Zinc Rich Primer	60	EP	Maripoxy 850 HPHS	240	PUR	Marithane	60	3	360

Product overview for Transformer and Radiators

Product Category	Product	Description	% Vol. Solid	DFT in μ
Epoxy Zinc	Maripoxy Zinc Rich Primer	Maripoxy Zinc Rich Primer provides cathodic protection to steel. Suitable for extreme corrosive environment. To be overcoated with Epoxy and Polyurethane.	65 \pm 1	50-75
Epoxy Surface Tolerant	Maripoxy HP HS 850 High Performance High Build High solid Surface Tolerant Anticorrosive Epoxy Coating	Maripoxy HPHS 850 Epoxy is a low VOC, two component High Performance high Build High Solid Surface Tolerant Epoxy coating, which can be used as primer cum finish. It is fast drying and fast return to service. It is having exceedingly high anticorrosion property. It can be used as- Primer, Intermediate or finishing coat <i>Available in Zinc Phosphate / MIO Version / Aluminium version.</i>	85 \pm 2	100-200
Epoxy Surface Tolerant	Maripoxy HS 800 Conventional Epoxy Mastic & DTM coating	Maripoxy HS 800 is a low VOC, two component high build, high solids conventional epoxy coating. It is cured with Polyamide and on curing it forms a hard and tough coating. Recommended to be used as DTM for PEB and other steel Structure for moderate corrosion protection. It can be used as- Primer, Intermediate or finishing coat <i>Available in Zinc Phosphate / MIO Version/ Aluminium version</i>	80 \pm 2	100-160
Epoxy Zinc Phosphate Primer	Maripoxy ZP 650 Zinc Phosphate Primer Multipurpose	Maripoxy ZP 650 is a 2 K high build anticorrosive epoxy primer. It contains anticorrosive zinc phosphate pigment. This is a multipurpose Epoxy primer which can be applied by spray and by Flow . This makes it suitable for Painting of wide range of steel items. <u>Recommended for Heavy Duty Equipment, Transformer and Radiators.</u>	65 \pm 2	50-75
Polyurethane	Marithane HPHS 670 High Solid Low VOC High Performance PU Coating	A 2K high-build Acrylic and Aliphatic isocyanate cured polyurethane coating. Excellent exterior durability Protects steel structure in most corrosive environment. Lightfast and UV resistant, Good gloss and gloss retention, excellent hardness. It Can be applied Direct to Metal.	67 \pm 2	60-100
Polyurethane	Marithane HP 550, High Performance PU Paint	A 2K Acrylic and Aliphatic isocyanate cured polyurethane coating. Excellent exterior durability, Lightfast and UV resistant, Good gloss and gloss retention, excellent hardness, and faster drying. High Performance PU Coating.	55 \pm 2	50-60
Polyurethane	Marithane HP 500 PU Coating	A 2K high-build Acrylic and Aliphatic isocyanate cured polyurethane coating. Excellent exterior durability Protects steel structure in most corrosive environment. Lightfast and UV resistant, Good gloss and gloss retention, Good hardness.	50 \pm 2	40-50
Polyurethane	Esothane 500 PU Paint	A 2K, Polyurethane coating, good durability and Good gloss retention, good hardness.	45 \pm 2	40-50
Synthetic Alkyd Paint	Marigold HP Synthetic Enamel	Based on synthetic Alkyd resin, provides glossy and lasting finish which dries by oxidation and can be overcoated in 4-6 Hours. To be applied on top of Epoxy/ Alkyd Primer. <i>Low-cost moderate performance topcoat for Radiator & Transformer in moderate climate.</i>	47 \pm 1	30-40
Oil & Heat Resistant Paint for internal	Marigold Oil & Heat Resistant Paint for internal of Transformer	Oil and Heat resistant paint for internal of transformer based on specially modified Synthetic Resin. It withstands high temperature of oil inside of transformer when in use. Apply two coats of paint to on internal surface to avoid any holidays.	40 \pm 1	2 X 25



MARIGOLD BRANCH OFFICES & WAREHOUSES

CHENNAI:(TAMILNADU) chennai@marigoldpaint.com MOBILE NO:9444841816/8511136952	BHOPAL:(MADHYA PRADESH) bhopal@marigoldpaint.com MOBILE NO:9827893939
FARIDABAD:(HARYANA) faridabad@marigoldpaint.com MOBILE NO:9810879597/9811470482	CUTTACK:(ORISSA) cuttack@marigoldpaint.com MOBILE NO:9861869058/9937191438
JALANDHAR:(PUNJAB) csakapurtraders@gmail.com MOBILE NO:9099399459/7973489033	JAIPUR:(RAJASTHAN) yashmarigold@gmail.com MOBILE NO:9958781176
MUMBAI:(MAHARASHTRA) dilipshah1112@gmail.com MOBILE NO:9833844181	LUCKNOW-(UTTAR PRADESH) lucknow@marigoldpaint.com MOBILE NO:9235300125/9235300128
RAIPUR:(CHATTISGARH) ajaybhavsar2012@yahoo.com MOBILE NO:9099398459	NEW DELHI-(DELHI) newdelhi@marigoldpaint.com MOBILE NO:7069690184/7982766204



Head Office & Factory
Marigold Paints Pvt Ltd
C-1/10 GIDC Estate,
Vallabh Udog Nagar 388120
Anand, Gujarat, India
Phone number +91 2692 236025
Email : info@marigoldpaint.com
www.marigoldpaint.com