

NATIONAL ECO ENAMEL (LEAD FREE) DECORATIVE COATINGS

TECHNICAL DATA SHEET

NATIONAL ECO ENAMEL (LEAD FREE)

PRODUCT DESCRIPTION	National Eco Enamel is an ecofriendly synthetic enamel paint based on modified high quality alkyd resin for architectural decorative and protective paints to interior/exterior surfaces applications. It is a lead free synthetic enamel and has
	moderately non – yellowing tendency. It dries to give a tough, flexible and long durable film. It has very good adhesion and abrasion resistance.
RECOMMENDED USES	It is recommended as an ecofriendly, lead free synthetic enamel for interior/exterior surfaces like metal, wood, masonry etc. It is also suitable for painting heavy equipments, vehicle repaint, super structures, cranes, bridges, pipeline etc. in mild industrial environments. It has an excellent opacity and hides minor surface imperfections. It is used for only air – drying purposes.

TECHNICAL DATA

COLOUR, DRY FILM	Selected colours only	Selected colours only	Selected colours only
FINISH, DRY FILM	Glossy	Semi Glossy	Matt
VOLUME SOLIDS	46 ± 2%	55 ± 2%	58 ± 2%
(ASTM D2697)			
SPECIFIC GRAVITY	1.10 ± 0.05	1.28 ± 0.05	1.50 ± 0.05
THEORETICAL SPREADING	$15 - 11.5 \mathrm{M}^2/\mathrm{LTR}$	$18 - 14 \text{ M}^2/\text{LTR}$	$19 - 14.5 \mathrm{M}^2/\mathrm{LTR}$
RECOMMENDED DFT	30 – 40 Microns/Coat	30 – 40 Microns/Coat	30 – 40 Microns/Coat
(DRY FILM)			
RECOMMENDED WFT	65 – 90 Microns/Coat	55 – 75 Microns/Coat	50 – 70 Microns/Coat
(WET FILM)			
FLASH POINT	25°C	25°C	25°C

DRYING TIME

Drying time @ 30 ℃ (Temperature, humidity, air movement, film thickness and number of coats all affect the drying time.)			
TOUCH DRY Glossy Semi Glossy Matt			
	5 – 6 hours	4 – 5 hours	1 – 2 hours
*DRY TO RECOAT	12 – 16 hours	12 – 16 hours	12 – 16 hours
HARD DRY	24 hours	24 hours	24 hours

^{*} For same generic type paint.



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ADVANTAGES

NATIONAL ECO ENAMEL	Lead free, modified high quality alkyd based glossy, semi	
(LEAD FREE)	glossy & matt finishes are available, very good adhesion and	
	abrasion resistance, tough, flexible and durable coating, less	
	yellowing tendency, good washability and easy cleaning etc.	

APPLICATION INSTRUCTION

SURFACE PREPARATION	Before application, the surface should be sound, clean and free	
	from oil, grease, loose particles, dust, etc. Application can	
	done by the recommended application methods.	

APPLICATION DATA

APPLICATION METHOD	Brush, Roller, Spray etc.
CLEANING/THINNING	National GP Thinner
THINNER (VOLUME)	5 – 10% depends on the method of application
CONV. SPRAY REQUIREMENTS	Possible
AIRLESS SPRAY REQUIREMENTS	Pressure: 2000 – 2200 psi
NOZZLE SIZE	0.018" – 0.020"
MIXING RATIO (BY VOLUME)	One pack
POT LIFE @ 30°C (100 ml)	NA

SYSTEM

RECOMMENDED SYSTEM	For Steel Surfaces	
To be applied on prepared surface.	National Red Oxide Primer : 1 coat	
	National Synthetic Undercoat	: 1 coat
	National Eco Enamel Gloss/Semi Gloss/Matt	: 2 coats
	For Masonry Surfaces	
	National PVA Primer Sealer for Masonry	: 1 coat
	National Stucco Filler (for Interior)	: 2 coats
	National Eco Enamel Matt	: 1 coat
	National Eco Enamel Gloss/Semi Gloss/Matt	: 2 coats

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NATIONAL/INTERNATIONAL TEST CERTIFICATES

Sr. No.	Test Description	Test Reference	Compliance
1	VOC	ISO 11890 – 2 GC – FID	Local Regulatory Requirements
2	Heavy Metals (Arsenic, Cadmium, Mercury, Lead, Hexavalent Chromium, Antimony, TBT, TPT)	ICP-AES IHP/GC-MS	Local Regulatory Requirements
3	Formaldehyde	USEPA 8260 / 3510	Local Regulatory Requirements
4	Lead Content	ICP – OES USEPA 3050 B	Local Regulatory Requirements

ADDITIONAL DATA

SHELF LIFE @ 30°C	18 months, in original sealed container, with proper storage
	conditions.

HEALTH & SAFETY

SAFETY PRECAUTIONS	As a general rule, avoid skin and eye contact by wearing overalls, gloves, goggles, and mask etc. Spillage on skin should immediately be removed by thorough washing with water and soap or suitable cleaner. Eye should be flushed with fresh water. Avoid inhalation of vapours and paint mist by wearing suitable	
	mask. In the event of ingestion and eye contact, seek medical attention immediately. Painting must be carried out in well-ventilated area.	
	This product contains flammable materials and should be kept away from the sparks and open flames, smoking in the area should not be permitted. Local safety regulations to be followed.	

STORAGE & HANDLING

STORAGE	Store the paint in proper storage conditions as per the local	
	regulations. Keep the paint container in sealed condition under	
	shed, away from direct sunlight and extreme temperatures. Do	
	not stock paint material near to any ignition sources. Do not put	
	back the half or unused material back in original container,	
	containing the supplied paint, to avoid contamination. Handle	
	with care. Stir well before use.	

NOTE: We warranty only the quality of our product and this data sheet is based on results obtained from experience and tests. We reserve the right to change data without prior notice. For surface preparation, safety details refer specifier and safety data.

This data sheet supersedes all previous issued. Issued: 0718

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ISO 9001 & 14001 OHSAS 18001 CERTIFIED FACTORY