



Industrial Finishing Specialists

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NYLON COATING FOR STEEL PRODUCTS. NEW BUILDING REGULATIONS (PART M) HAVE COME INTO FORCE. HANDRAILS ARE REQUIRED TO BE “WARM TO TOUCH”

Part M of the building regulations, which deals with accessibility to buildings, has a design recommendation that handrails should not be cold to touch and architects are increasingly specifying nylon coating which addresses this issue.

Industrial Finishing Specialists (IFS) recognises a need for local fabricators to have access to a local nylon applicator and not have to go out of the area for this service. To satisfy this market IFS are now in a position to offer nylon coating (Nylon-R) alongside our powder coating service.

Nylon-R is a coating system for metals which is based on a Nylon 11 polymer manufactured by Elf.

Due to its unique combination of properties including remarkable abrasion resistance, flexibility, resistance to impact, weathering resistance and inertness to chemicals and solvents, Nylon 11 has historically been seen and used as a high specification engineering polymer.

Most common standard RAL and BS colours are available, as well as metallics, hammers, sparkles, pearlescents, speckles and fluorescents.

Any house or special colours can be formulated.



Graffiti Nylon -R is unaffected by solvents, meaning aerosols and felt tip pens can not penetrate the surface.

Mould Nylon-R will resist mould and fungal attack

Corrosion The corrosion and weathering resistance of a properly applied Nylon-R will be superior to most other coatings due to better edge coverage and chemical inertness.

Environmentally Friendly Nylon-R is a renewable resource, based on castor oil rather than petroleum.



NYLON - R COMPARATIVE DATA

TEST	STANDARD	NYLON - R	EPOXY	POLYESTER TGIC
Specific Gravity		1.04 to 1.25g/cm	1.3 to 1.8g/cm ³	1.2 to 1.7g/cm ³
Adhesion Class	NFT 58112	4	4	4
ERICHSEN Deformation	NFT 30019	10mm	7mm	6mm
Conical Bending	ASTM D522	6mm	6mm	6mm
Impact Resistance	NFT 30-039	8 Joules	4 Joules	6 Joules
Abrasion Resistance	CS10 load 1kg 500 Revolutions	1.4mg	15mg	19.5mg
PERSOZ Hardness	NFT 30-016	190s	300s	300s

Note:- In every case Nylon - R is best.
All on mild steel plates - no pre-treatment.

Technical Data Sheet

NYLON-R

PHYSICAL PROPERTIES OF THE POWDER

Standards	Unit	Value
Polyamide 11		
ISO1218	°C	187 ± 4
LASER	micron	90 % of particles between 20 & 63
Powder particle size		0,40
Apparent gravity	ISO 60 - DIN 53 468	g/cm3

COATING CHARACTERISTICS (on degreased grit blasted steel and PRIMER)

Standards	Unit	Value
Specific gravity at 23°C (depending on the colour)	DIN 53 479 - ISO R 1183	g/cm3 1.2 ± 0.15
Average thickness of the coating	micron	100 to 200
VICAT point under 1 daN	DIN 53 460	°C 181
Adhesion	NFT 58-112	Class 4
SHORE D hardness	DIN 53 505	70% 10%
PERSOZ hardness at 20°C	NFT 30-016	Second 160 to 280
Wear TABER resistance-wheel	DIN 16-926 - NFT 30-015	mg 4 to 12
CS 17 Load 1kg - 100 cycles		
Gloss at 60° (depending on the colour)	DIN 53 223 - NFT 30-064	% 45 to 75
Temperature resistance		°C 40 to +80
Impact resistance Ø 23 mm (depending on the colour) NFT 30-039		joule from 2 to 8
Dielectric breakdown voltage 330 µ	ASTM D 149-81	kV > 8
Chemical resistance	ASTM D 149-81	Very Good
Salt Spray test after 1000 hours	ASTM B 117	
UV Resistance	Adhesion Creeping	mm 4 2 Very Good

NYLON-R STANDARD COLOUR LIST

All these colours are available ex stock. They incur no matching charge and are normally despatched within 3 days. This list is continually being expanded so if the colour you require is not listed please phone. In addition to these, any colour can be custom matched (normally despatched in 5 days). Can be supplied with colour certification. Metallics, Hammers, Fleck, Flip Flop, Fluorescents, also available.

RAL STANDARDS

1000 Beige	1001 Beige	1003 Yellow	1004 Yellow	1006 Yellow	1007 Yellow	1011 Beige
1013 Cream	1014 Ivory	1015 Cream	1016 Yellow	1017 Yellow	1018 Yellow	1019 Beige
1021 Yellow	1023 Yellow	1028 Yellow	1033 Yellow	2000 Orange	2002 Orange	2003 Orange
2004 Orange	2008 Orange	2009 Orange	3000 Red	3001 Red	3002 Red	3003 Red
3004 Red	3005 Red	3007 Red	3011 Red	3013 Red	3014 Pink	3015 Red
3016 Red	3017 Pink	3020 Red	3022 Red	3031 Red	4001 Purple	4004 Purple
4005 Purple	4006 Purple	4008 Purple	5000 Blue	5001 Blue	5002 Blue	5003 Blue
5004 Blue	5005 Blue	5007 Blue	5009 Blue	5010 Blue	5011 Blue	5012 Blue
5013 Blue	5014 Blue	5015 Blue	5017 Blue	5018 Blue	5019 Blue	5020 Blue
5021 Turquoise	5022 Blue	5023 Blue	5024 Blue	6000 Green	6001 Green	6002 Green
6004 Green	6005 Green	6007 Green	6009 Green	6010 Green	6011 Green	6012 Green
6016 Green	6017 Green	6018 Green	6019 Green	6020 Green	6021 Green	6022 Green
6024 Green	6026 Green	6027 Green	6028 Green	6029 Green	6032 Green	6033 Green
6034 Blue	7000 Grey	7001 Grey	7005 Grey	7006 Grey	7010 Grey	7011 Grey
7012 Grey	7015 Grey	7016 Grey	7021 Grey	7022 Grey	7024 Grey	7030 Grey
7031 Grey	7032 Grey	7033 Grey	7035 Grey	7036 Grey	7037 Grey	7038 Grey
7039 Grey	7042 Grey	7043 Grey	7044 Grey	8001 Brown	8008 Brown	8011 Brown
8012 Brown	8014 Brown	8015 Brown	8017 Brown	8019 Brown	8022 Brown	8024 Brown
8025 Brown	8070 Brown	8080 Brown	9001 Cream	9002 Grey/White	9003 White	9004 Black
9005 Black	9006 Silver	9007 Silver	9010 White	9011 Black	9016 White	9017 Black

BS5252 STANDARDS

00A01 Grey	00A05 Grey	00A07 Grey	00A09 Grey	00A13 Grey	10A01 Grey	10A03 Grey
10A07 Grey	10A11 Grey	04B15 Pink	04B21 Beige	08B15 Cream	08B17 Beige	08B21 Brown
08B25 Brown	08B29 Brown	10B19 Beige	10B15 Cream	10B17 Beige	10B21 Green	10B29 Green
12B21 Grey	12B25 Green	12B29 Green	18B21 Grey	18B25 Grey	22B15 Mauve	02C33 Pink
02C37 Pink	02C39 Red	04C33 Pink	04C37 Red	04C39 Brown	04C40 Pink	06C33 Beige
06C37 Brown	08C31 Cream	08C39 Brown	10C31 Cream	14C35 Green	14C37 Green	14C39 Green
14C40 Brown	16C37 Turquoise	18C35 Blue	18C39 Blue	20C33 Blue	20C37 Blue	20C40 Blue
24C39 Purple	04D45 Red	12D45 Green	16D45 Green	20D45 Blue	22D45 Blue	00E53 Black
00E55 White	04E49 Pink	04E51 Red	04E53 Red	04E56 Red	06E53 Orange	08E51 Yellow
10E50 Yellow	10E51 Yellow	10E53 Yellow	10E55 Yellow	14E53 Green	14E56 Green	16E53 Turquoise
18E49 Blue	18E53 Blue	20E50 Blue	20E51 Blue			

