

Fact Sheet - MetaLine 785

Product specification

Quality type	ultra dynamic responding	spray elastomer
Process	polymerized	not vulcanized
Preferred applicable by	cartridge spray / HSM	low pressure
Alternatively applicable by	plural component airless	high pressure
Coating thickness	min. 1 mm (40 mils)	max. unlimited
Surface character	smooth, high-gloss	tension free
Consumption	1.2 kg/m ²	0.24 lb/ft ² per 40 mils
Curing mode	3-K	shrink & swell free
Shelf life	< 24 months	
Solidification	> 1 day	
No adhesion to	glass, ceramic, ebonite, enamel	
Surface structure	smooth to ultra grained	

Physical properties

Density	1.05 g/cm ³	0.037 lb/in ³
Tensile Strength	20 N/mm ²	2,900 psi
Adhesion to mild steel	> 15 N/mm ² (1.0037)	> 2,175 psi (ASTM A 36)
Magnetical interference	≈ 10 % loss	3 mm (120 mils) coating
Vibration dampening	≈ 55 %	4 mm (160 mils) coating
Hardness Shore A	82 (sprayed)	85 (casted)
Coefficient of static friction	$\mu(0) = 0,6$	high grip
Elongation at break	380 %	
Preferred load impact angle	40 ° - 90 °	
Mechanical finishing	lathe operation, drilling, milling	

Electrical figures

Electrical insulation	> 5 kV per mm thicknes	5,000 volts per 40 mils
Dielectric surface resistivity	> 7 x 10 ¹⁰ Ohm	in delivery status
Anti-static properties	< 1 x 10 ⁹ Ohm	with ML 960 Anti-Static

Caloric figures

High temperature resistance	60°C wet / 120°C dry	140°F wet / 250°F dry
Low temperature resistance	- 50°C (dry)	- 60°F (dry)
Thermal conductivity	0.2 W/m · K	0.11 BTU/h · ft · °F

Wear resistance

DIN 53 516 abrasion	> 55 mm ³	rubber > 120 mm ³
DIN 53 516 abrasion (US)	> 0,003 cu in.	rubber > 0,007 cu in.
TABER abrasion (H22 Wheel)	8.2 mg	0.12 grain
Erosion resistance	up to 25 % above AISI 316	
Cavitation resistance	excellent & beyond all metallic structures	
Visual wear control indicator	available by color change during spraying	

Water life

Corrosion resistance	plus 6,000 hours	salt spray testing
Corrosion protection principle	active - passive	cathodic - encapsulation
Flow speed resistance	< 70 m/sec	< 230 ft/sec
Diving depth	< 700 meter	< 2,300 ft in saltwater
Anti-Fouling properties	self-cleaning effect	> 22 m/sec flow speed
Weather resistance	reasonable	not colour stable
Chlorine prior application	maximum 20 ppm	surface purity
Class approvals	„white paper“	Lloyd's Register

Chemical resistance & acoustics

Noise reduction	up to 5 dB(A)	structural born noise
Gamma radiation resistance	good & decontaminable	
Chemical resistance	pH 3 - 11	

Health and Safety

Solids content	100 %	no solvent - zero VOC
Flammability	B2	normally inflammable
Food & pharma conformity	FDA 177.1680 (21)	EU 1935/2004
Drinking water approvals	AS/NZS 4020:2005	BS 6920 Part 2.6
Purity	no free isocyanate	no polyurea, no silicone

protect

repair

save

cover

improve