

# METRONOM DERI

## **TECHNICAL SPECIFICATION**

### **1. UPPER LEATHER :**

Upper Material : Cow leather  
Colour : Black  
Thickness : 1.8 mm ( minimum )

Tear strength of the material of the upper	120 N (minimum)
Tensile strength of the material of the upper	15 N/mm <sup>2</sup> (minimum)
pH (only for leather upper)	3.2 (minimum)
Flexibility	No deformation at 50000 cycles (minimum )
Water vapour permeability (Breathability)	0.8 mg/(cm <sup>2</sup> ·h) (minimum)

### **2. INNER SIDE**

Material : Polyamide  
Colour : Black

Tearing strength of the fabric	> 130 N
Abrasion resistance	> 25.600 dry cycles > 12.800 wet cycles
Water repellency	> 4
Colour fastness to weathering	> 4
Water vapour permeability (Breathability)	2 mg/(cm <sup>2</sup> ·h) (minimum)

### **3. LINING :**

Property : Light weight, Breathable, sweat absorber  
Material : Polyamide

Tear strength of the lining	> 15 N
Abrasion resistance	> 25,600 dry cycles > 12,800 wet cycles
Water vapour permeability (Breathability)	2 mg/(cm <sup>2</sup> ·h) (minimum)

### **4. LASTING INSOLE BOARD :**

Material : Bonded fibre board  
Thickness : 2,0 mm ( minimum )  
Cracking angle : 90 degree ( minimum )

Water Absorbtion	> 70 mg/cm <sup>2</sup>
Water Disabsorbtion	> 80%

## 5 .SUPPORTS :

Toe cap support :	Thermoplastic fibre board
Thickness :	1,6 mm ( minimum )
Ankle (stiffener ) support :	Thermoplastic fibre board
Thickness :	1,4 mm ( minimum )
Collar Support :	6mm, 65 density PU foam
Tongue Support :	6mm, middle density sponge

## 6 . ACCESSORIES AND OTHERS :

Sewing thread:	Polyamide
Laces:	Polyamide Round shape Length: According to the shoe
Inlay Sole ( Footbed ) :	Micro fiber coated opencell PU – Sweat absorber, removable, washable

Water Absorbtion (footbed)	> 70 mg/cm2
Water Disabsorbtion (footbed)	> 80%

## 7.SOLE :

- Sole Technology : Direct Injection and Moulded :
- Material : Double density polyurethane ( midsole and outsole layers )
- Shock Absorbing Heel : provides comfort when jumping ,walking, running , etc. by absorbing downward force in excess of a body weight
- Hydrolysis resistance : provides durability on sole against humidity and hot weather conditions and longer self life for products at international storage terms
- Oil resistant outsole
- Slip resistant out sole

Energy absorbtion (Shock absorber heel)	20 joules (minimum)
Hydrolysis resistance (aging at 70 celcius, 100% humidity in 7 days)	Cut growth will be maximum 6mm after 150.000 cycles
Flexing resistance	Cut growth will be maximum 4mm after 30.000 cycles
Abrasion resistance of outsole	150 mm3 volume loss (maximum)
Upper sole bonding (if sole material is not teared) (if sole material is teared)	4 newton/mm (minimum) 3 newton/mm (minimum)
Oil resistant outsole	12% volume increase (maximum)
Slip Resistant outsole	SRC Level
Tear Strength of sole	8 kN /m (minimum)