NEW

# MECHANICAL PROTECTION ESD GLOVES

Especially designed for protection of electronic device from **E**lectro**S**tatic **D**ischarge (ESD)

Optimal **dexterity**, **comfort** and **durability** while dissipating static electricity in precise and repetitive tasks





**ULTRANE 544** 

A solution for every hand that works



# BACKGROUND

In some critical production environments, electrostatic discharges can damage sensitive electronic device. Since human beings are electricity conductive, operators must wear ESD protective gloves for handling ESD devices.

#### What is an electrostatic phenomena?

If two materials are brought into contact and rubbed, there is an exchange of electric charges (static electricity). When those charges are not dissipated, then they accumulate and electrostatic discharges can occur.

#### Why are dissipative gloves are necessary?

A dissipative material has the ability not to accumulate electrostatic charges. It dissipates them. Dissipative gloves are necessary to avoid electrostatic discharge.

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#### Where do electrostatic discharges can occur?

EPA (ESD protected area) or ESD protected zone. Main industries: electronics, automotive, consumer products.

ATEX zone (EXplosive ATmosphere).

Main industries: chemical, pharmaceutical, agricultural (grain silo).

#### Which standard deals with electrostatic properties?

	GLOVES STANDARDS REQUIREMENT	TEST METHOD	PICTOGRAM
Protection of Electronic devices from ElectroStatic Discharge (ESD)	No standard	No test method	No pictogram
<b>ATEX</b> environment	<b>EN 16350</b> Vertical resistance: <10 <sup>8</sup> Ω at 25% relative humidity *The tests must be performed on 5 samples which must all pass the limit of vertical resistance	EN 1149-2	Introduced in EN ISO 21420: 2020 EN 16350 NEW

### MAPA PROFESSIONAL POSITION

Working in ATEX zones or handling electronic devices, both areas have the same need for suitable gloves : they must not accumulate charges and they must be dissipative.

As until now there is no standard established for ESD gloves, at MAPA PROFESSIONAL we decided to refer to the EN 16350 standard (ATEX gloves) to evaluate the dissipative properties of our gloves. This standard is very strict, as a consequence a glove complying with the EN 16350 standard will be suitable for handling electronic devices.



Wearing gloves alone does not prevent from electrostatic discharges. The worker must wear suitable dissipative clothing and footwear to be permanently earthed.



# MAPA SOLUTION ULTRANE 524 / 544

#### **ULTRANE 524**





### ULTRANE 544





#### Protection of electronic device from ElectroStatic Discharge (ESD)

No risk of damage of pieces handled



#### Touch screen

Ultrane 524 : thumb and index Ultrane 544 : full Touch screen



### **High Comfort & Breathability**

Excellent dexterity at fingertips Second skin effect (thin liner) Suppleness & flexibility Breathability



#### Additional key features

No pollution thanks to light colour to spot dirtiness Washable 1 time at 40° Silicon Free Ultrane 544 : DMF Free

### EXAMPLES OF APPLICATION



Automotive OEM Assembly line / Electric card



White Appliances Handling / Mounting of thin and small part Assembly line



Automotive Tier1 Assembly line / Electric Motor

## FOR INDUSTRIES SUCH AS

Automotive industry Aeronautics industry

**ULTRANE 524** 

White appliances Electronics industry



**OEKO-TEX**®

CONFIDENCE IN TEXTILES STANDARD 100 CQ 979/2 IFTH

Tested for harmful substances. ww.oeko-tex.com/standard100

# PRODUCT SPECIFICATION

#### Products specifically developed to dissipate electrostatic charges for precise and repetitive tasks where **dexterity**, **comfort and durability** are required

Reference	ULTRANE 524	ULTRANE 544	
Standards & labels	EN 388 2X20A EN 16350	EN 388 EN 16350 EN 16350 CONTRELE IN TENTS STANDING CONTRELE IN TENTS STANDING	
Interior and exterior finish	Seamless textile with conductive fiber Polyurethane coating on palm and fingers Knitted wrist	Seamless textile with conductive fiber Foam nitrile conductive coating on palm and fingers Knitted wrist	
Gauge	18	15	
Length	22 - 27 cm		
Size	67891011		
Packaging	1 pair individually packed – 1 masterbag of 12 pairs – 96 pairs by carton		
Washable	1 time at 40°C		
Advantages	Protection of electronic device from ESD <b>524</b> : Touch screen at thumb and index / <b>544</b> : Full Touch screen Comfort suppleness and dexterity Silicon Free <b>544</b> : DMF Free		
Industries	Automotive industry / Aeronautic industry / White appliances / Electronics industry		

There are a variety of risks depending upon the environment. Mapa Professional provides you with a complete range of protective gloves.

A solution for every hand

that works

