



## **JISTAT 1000**

### **Antistatic agent for Rubber**

Generally when rubber makes contact with metal, the rubber has a high conductivity rate thus creating static discharge due to electron movements resulting in electrical discharge to other materials caused by the friction. Rubber itself is very difficult to use as a non conductive static agent. With this in mind we have created JISTAT 1000, an antistatic agent for rubber. JISTAT 1000 is an antistatic agent for outsoles, semi-conductive, mat and flooring materials which which contain NBR/CR in the plasticizer (softening qualities) giving an antistatic quality to the rubber.



#### ◎ FEATURES

- Excellent antistatic and dissipative activity ( $10^7 \sim 10^9 \Omega/\text{sq}$ )
- Excellent durability and compatibility
- Excellent light stability and heat resistance
- Easily diluted to recreate any color spectrum or remain as a transparent liquid.
- JISTAT 1000 does not affect the physical characteristics of rubber with its variation of adhesive and hardness.

#### ◎ APPLICATION

- Rubber(NBR, CR etc.,)

ex) Printer Roller(pick up roller, transper roller, supply roller, ADF roller, feed roller), Outsole, Midsole, Sheet, Coating agent.

### Application Example

Antistatic Agent	Resin	Use Quantity	Surface Resistance( $\Omega$ /sq)
JISTAT 1000	NBR Sheet	2 ~ 3 %	$10^8 \sim 10^9$
		3 ~ 4 %	$10^7 \sim 10^8$
		5 ~ 6 %	$10^6 \sim 10^7$

- Humidity : 45%, Temp :  $20 \pm 1^\circ\text{C}$
- Relative Humidity: BACHARACH (PITTSBURGH, PA 15238)
- Surface Resistance: JAPAN SHISHIDO MEGASTAT HT-301

### ◎ PHYSICAL PROPERTIES

**Composition : Conductive polymer and Nonionic surfactants**

**Appearance : Colorless transparent liquid /  $25^\circ\text{C}$**

**Solubility : Soluble in Organic Solvents and water**

**Specific gravity :  $1.45 \pm 0.05(\text{g}/\text{cm}^3)$**

### ◎ HANDLING & STORAGE

- The self life of this agent is minimum one year in normal indoor.
- Do not use near fire or flame.
- Store in well-ventilated place.

### ◎ PACKING

**NET 25/200/250Kg in Plastic Drum**

 **JISTAT 1000 Application Guide (Rubber Sheet)**

Materials		#1	#2	#3
NBR/CR		25/75		
ZnO		5		
Stearic acid		1		
Irganox 1076		2.5		
White carbon		35		
DEG		2		
Pigment		2.5		
TT		0.07		
DM		1.0		
Sulfur		1.5		
JISTAT 1000		2	4	6
Tensile strength	kg/cm <sup>2</sup>	175	174	175
Tear strength	kg/cm	46	42	41
Elongation	%	908	913	911
Hardness	A type	70	71	69
Electronic resistance	Ω/sq	9×10 <sup>8</sup>	1×10 <sup>8</sup>	7×10 <sup>7</sup>