

BRINGING LIFE  TO PLASTICS

# Additives ANTI<sup>i</sup>STATIC



→  
MAKES FILMS  
AND FIBRES  
EASIER TO  
PROCESS

←  
LESS STATIC,  
MORE PROTECTION





PROTECTS FROM  
EXPLOSION




# ANTISTATIC MASTERBATCH

PLASTICS ARE GENERALLY VERY GOOD INSULATORS, THAT PREVENT EFFECTIVE GROUNDING OF THE STATIC ELECTRICITY CAUSED BY FRICTION FROM THE THE HIGH SURFACE RESISTANCE OF THERMOPLASTICS. THE CHARGE THEREFORE REMAINS ON THE SURFACE OF THE PLASTIC AND LEADS TO A SERIES OF PROBLEMS AND EVEN POTENTIAL DANGERS.



LESS STATIC,  
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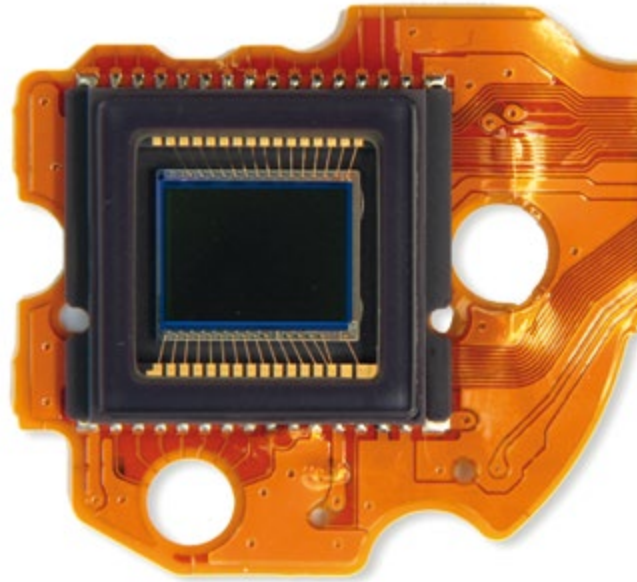
- \_ An electrical discharge during a production process that comes in contact with flammable substances such as gas or fine powders can result in an explosion or fire.
- \_ Films, tapes or fibres adhere to each other due to an electrostatic charge making them difficult to process or to use.
- \_ An object packed in plastic or the plastic packaging itself attracts dust by electrostatic charge and become less optically appealing, reducing its value at point of sale.
- \_ Sensitive electronic devices or components such as microchips that are not transported in antistatic packaging can be permanently damaged by electrical discharge.

Most polymers demonstrate a surface resistance of  $>10^{12}$  Ohm and in general around  $10^{16}$  Ohm. Through the addition of MAXITHEN® antistatic masterbatches, this can be decreased down as far as  $10^{10}$  Ohm.



FOR THIN AND THICK WALL  
OBJECTS





## MiGRATING ANTiSTATIC

### **HP7041/05AS**

- \_ amine based
- \_ non-ionic
- \_ for Polyethylene (LDPE, LLDPE, HDPE)
- \_ main application in packaging films
- \_ suitable for direct food contact according to EU 10/2011

### **HP77571AS**

- \_ amide based
- \_ non-ionic
- \_ for Polyethylene (LDPE, LLDPE, HDPE)
- \_ main application in packaging films, for packing of corrosion sensitive goods (e.g. electronics etc.)
- \_ suitable for direct food contact according to EU 10/2011

### **HP75590AS**

- \_ amine based
- \_ non-ionic
- \_ with „quick starter“ component for fast unfolding of antistatic activity
- \_ for Polyolefines (LDPE, LLDPE, HDPE, PP)
- \_ suitable for direct food contact according to EU 10/2011

### **PP791310AS**

- \_ based on fatty acid ester,
- \_ for Polypropylene (homo- and copolymers)
- \_ for films and thick wall articles
- \_ suitable for direct food contact according to EU 10/2011

### **PP7AA7840AS**

- \_ amine based with synergist for long lasting antistatic effect
- \_ non-ionic
- \_ for Polypropylene (homo- and copolymers)
- \_ for films and thick wall articles
- \_ suitable for direct food contact according to EU 10/2011

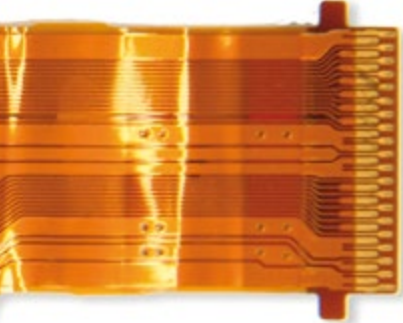
### **SB78700AS**

- \_ Alkylsulfonate based
- \_ for Styrenic Polymers
- \_ for films and thick wall articles
- \_ suitable for direct food contact according to EU 10/2011

### **PET7AA7050ASCR**

- \_ Alcane Sulfonate based
- \_ for PET (A-,C-,G-PET)
- \_ suitable for direct food contact according to EU 10/2011

FOR SENSITIVE COMPONENTS



## NON-MiGRATING ANTISTATIC

Non migrating, permanent Antistatics generally are based on conductive Polymers, offering permanent antistatic effect for thin- and thickwalled articles.

Dispersion of MAXITHEN® into a customer-specific polymer creates an interpenetrating polymer network (IPN) that increases the conductivity of the polymer and reduces the negative partially charged state.

MAXITHEN® permanent antistatic masterbatches are suitable for injection moulding and extrusion processes including on blown film lines and numerous other applications, in accordance with the recommendations and guidelines in our technical documentation.

- \_ Non-leaching
- \_ Permanent grounding of static charge-states
- \_ No contamination of packaged objects
- \_ No surface adhesion
- \_ Still effective below 30% relative air humidity
- \_ Unlimited shelf-life
- \_ Efficient and rapid processing
- \_ Improved performance for printing or gluing on the polymer surface compared to leaching systems

- UNS7AA5370AS:** for polyolefines
- UNS7AA5800AS:** for polyolefines; suitable for direct food contact according to EU 10/2011
- UNS7AA9530AS:** for PP fabrics
- UNS7AA5380AS:** for Styremics
- UNS7AA8130AS:** for Styremics, POM
- UNS7AA8840AS:** for PET-G
- UNS7AA8850AS:** for PET-A, PBT

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