

MECOSTAT[®]-3

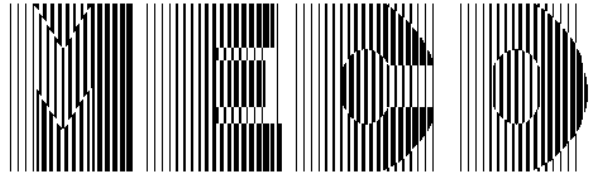
ANTISTATIC ADDITIVE FOR PLASTICS

LDPE/HDPE

MECOSTAT[®]-3/572

MECO
ENERGIE-KOLLEKTOREN GmbH
Radolfzeller Str. 56
D-78476 Allensbach / Germany

phone: ++49 (0) 75 33 / 94 98 3 - 0
fax: ++49 (0) 75 33 / 94 98 3 - 33
e-mail: service@mecostat.de
Internet: <http://www.mecostat.com>



General

MECOSTAT-3/572 is a highly effective antistatic masterbatch, which is based on the preparation of GMS and alkylamine ethoxylate.

The masterbatch is a preparation of fast working antistatic substances as well as of long time working substances, so that an antistatic effect can already be seen after a short time and has a long term effect.

Due to the synergistic effect of this combination low dosage rates (0.4 to 1.5 %) of **MECOSTAT-3/572** will give a sufficient result of the antistatic effect.

It is mainly used in injection moulding and extrusion area of PE.

The final result of the surface resistivity is depending on the environment parameters (relative humidity, temperature). For optimum results the relative humidity must not exceed 40%.

The resistance to temperature of the product guarantees that subsequent thermoforming can be performed without problems.

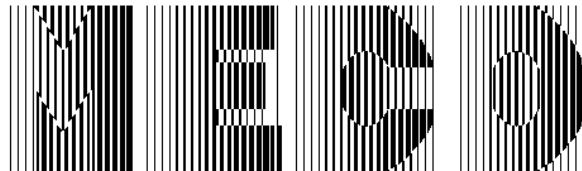
Areas of Application

Antistatic finishing of

- thermoforming sheet
- other foils and sheets
- moulded, injection moulded and hollow bodied parts

Properties

- delivery form : free flowing pellets
- fast migration of the additive, antistatic effects already after a few hours
- long term antistatic properties for several years with reduction of the surface resistance to $10^9 - 10^{10} \Omega$ under standard climate conditions
- it is easier to process film or sheet with lower surface resistance through the later processing steps like sliding, cutting and folding.
As well the plastic will attract much less dust which is important for the packaging industry.
- temperature resistance guarantees unproblematic thermoforming without impairing the antistatic finishing
- unproblematic recycling of the antistatic coated plastics
- the pellet form combines a remarkable low dust content with excellent fluidity
- the pellets are highly resistant to attrition, offering a narrow particle size distribution and improved industrial hygiene
- easy dosing of the antistatic additive



Food contact

MECOSTAT-3/572 as well as the raw materials contained in it comply with the requirements of the German Requisites Act, the appropriate EC-Directives and also with the FDA, EC (SCF)-requirements on the antistatic finishing of plastics in food packaging (Details see Food Contact Approval Document).

Processing

- The masterbatch can be added directly during the extrusion or injection moulding process
- Dosage rate: 0.4 to 1.5 %
- The melting range of **MECOSTAT-3/572** is around 50°C.
- For very thin films the adding rate should be more than 1.5%.
- For the production of coextruded sheets **MECOSTAT-3/572** is added into the outside-layer(s). In case that the antistatic effect is required very fast, **MECOSTAT-3/572** can additionally be added into the main layer.
- The material can be processed dust-free, with the result that the ambient air is unpolluted.
- **MECOSTAT-3/572** can be premixed with some of the PE resin and then be added to the resin for an equal mixing. This as well should be done if the feeding process does not allow an addition of one material in a small quantity as required.
- **MECOSTAT-3/572** can be blended with all known additives. In combination with fillers (for example: TiO₂), it can be possible, that there is some adsorption of the additive. In this case the amount of the additive should be increased to get the same result.
- for detailed processing and safety information, please refer to the appropriate Safety Data Sheet
- due to the large number of applications and processing procedures we would like to point out that corresponding tests have to be performed by the customer to make sure that there will be no incompatibility with the raw materials, additives and the processing procedures

Packing

- pallets of 40 x 25 kg PE bags (1000 kg)

Service

We offer comprehensive technical support.

Our Application Technology Department is at your disposal for the design of optimal application processes as well as for preparing suggestions for adapting installations already in use.