Product Data Sheet

Armostat® 300

Chemical description
Tallow bis(2-hydroxyethyl)amine, liquid to paste

Synonyms:
- Oleyl bis(2-hydroxyethyl)amine
- Bis(2-hydroxyethyl) (tallow alkyl)amine
- Alkyl (C₁₄-C₁₈) bis(2-hydroxyethyl)amine

CAS No. : 61791-44-4
EINECS/ELINCS No. : 263-177-5
TSCA status : listed on inventory

Specifications
Color : 200 Pt-Co max.
Equivalent weight : 340-360 g/eq
tert-Amine : 97.0% min.
Water : 0.2% max.

Characteristics
Appearance, 25°C : liquid to paste
Melting/Freezing point : 32°C
Flash point (Cleveland Open Cup) : 201°C
Viscosity, 35°C : 75 mPa.s
Density, 35°C : 0.890 g/cm³
Auto ignition temperature : 285°C
Vapor pressure, 20°C : <0.01 kPa
Solubility in water : practically insoluble

Storage
AkzoNobel recommends to store Armostat 300 in a dry well-ventilated place at 25°C (77°F) max. Prolonged storage over 60°C (140°F) can cause some discoloration.

When stored under the recommended storage conditions, Armostat 300 will remain within the AkzoNobel specifications for a period of at least 12 months after delivery.

Packaging and transport
The standard packaging is 180 kg (397 lb) net in a steel drum. A full pallet carries 720 kg net (USA 1587 lb). Delivery in bulk is also possible.

Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your AkzoNobel representative.

Armostat 300 is classified as Amines, solid, corrosive, n.o.s.; Division 8; UN 3259; PG III.

Safety and handling
Please refer to the Material Safety Data Sheet (MSDS) for detailed information on the safe storage, use and handling of Armostat 300. This information should be thoroughly reviewed prior to acceptance of this product.
The MSDS is available at www.akzonobel.com/polymer.
Applications

Armostat 300 is an internal antistatic additive that can be used in various polymers such as PE, LDPE and PP. Armostat 300 gives sustained antistatic action and is especially effective in film applications also due to its relative fast migration. Armostat 300 is at ambient temperature a paste. When heated at 40-45°C the product can be dosed as a liquid directly into the polymer by using a single or twin-screw extruder.

Pigment or color concentrates should be mixed with the antistatic agent prior to extruding. Premixing ensures uniform distribution of Armostat 300 in the resin while Armostat 300 acts as a dispersion aid to the pigment color concentrate.

After being mixed into the polymer Armostat 300 continuously migrates to the surface of the finished product where it provides excellent antistatic performance. It is especially suitable for all PE film applications.

Some indication for the level applied in various polymers is given below:

<table>
<thead>
<tr>
<th>Polymer</th>
<th>Addition level (%)</th>
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<tbody>
<tr>
<td>PE</td>
<td>0.1 - 0.3</td>
</tr>
<tr>
<td>PP</td>
<td>0.1 - 0.3</td>
</tr>
<tr>
<td>LDPE</td>
<td>0.1 - 0.3</td>
</tr>
<tr>
<td>HDPE</td>
<td>0.1 - 0.3</td>
</tr>
<tr>
<td>LLDPE</td>
<td>0.1 - 0.3</td>
</tr>
</tbody>
</table>

Armostat 700 can be used as an alternative to Armostat 300. Armostat 700 is also an oleyl bis(2-hydroxyethyl) amine, however with a somewhat different carbon chain length distribution, causing it to be liquid at room temperature.

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