## TECHNICAL DATA SHEET

**Product Name**  
Nucleating Agent SW-ZC-3988

**Equivalent Brand**  
Millad 3988

### Identification

**Synonyms**  
1,3:2,4-Bis(3,4-dimethylbenzyliden) sorbitol

**Molecular Formula**  
C₆₀H₇₀O₆

**Molecular Weight**  
414.49

**CAS Number**  
135861-56-2

**EINECS/ELINCS**  
N/A

### Properties

**Appearance**  
White powder

**Melting point**  
250 °C min

**Density**  
1.195

**Stability**  
stable under ordinary conditions

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Moisture</td>
<td>0.5% max</td>
</tr>
<tr>
<td>Melting point</td>
<td>250 °C min</td>
</tr>
<tr>
<td>Particle size</td>
<td>325mesh min</td>
</tr>
</tbody>
</table>

### Introduction

Nucleating transparent agent SW-ZC-3988 promotes the resin to crystallize by providing crystal nucleus and makes the structure of the crystal grain fine, thus improving the products' rigidity, heat distortion temperature, dimension stability, transparency and luster. In addition, nucleating transparent agent SW-ZC-3988 can shorten the molding cycle of products, expand the processing conditions and strengthen the smoothness. Nucleating transparent agent SW-ZC-3988, the third generation of sorbitol nucleating transparent agent, has the same chemical structure and application performance with Millad 3988. Compared with the first generation DBS and the second generation MDBS, it has superior biological applicability, as it is non-toxic and tasteless and will not produce undesirable smell when processing. Nucleating transparent agent SW-ZC-3988 is especially applicable to resin of top-grade polypropylene.
products, such as medical supplies and food packaging. And it is more suitable for food packaging materials than the second generation.

**Application**

Nucleating transparent agent SW-ZC-3988 is especially applicable to transparent plastic products like medical supplies, stationery, beverage packaging, transparent cups, bowls, basins, plates, CD boxes and so on, also fit for the high-temperature sterilization products and widely used in PP sheet and transparent PP tubes. It can directly be used after mixing with PP dryly and also be used after being made into 2.5~5% seed grains. Generally, the transparency of 0.2~0.4% nucleating transparent agent is rather significant. The proposed amount of addition is 0.2~0.4% and the processing temperature is 190 ~ 260 ℃.

**Packing and Storage**

**Packing:** In 5 kg or 10 kg carton with inner bag

**Storage:** Keep container tightly closed in a dry and cool place.

**Safety Information**

Non-hazardous for air, sea and road freight.

Detailed safety information is contained in each Material Safety Data Sheet, which can be obtained from our company. Please contact at: sales@sunwisechem.com.