

## Stanyl® PA46

### Recommendations for Material Handling

Stanyl® granules are supplied dry in airtight moisture proof packing.

**Moisture Absorption:** Every lot of Stanyl® is tested for moisture content and viscosity. A certificate with the relevant lot data can be delivered with the materials. Stanyl® is packaged at a maximum level of 0.1% moisture content. Drying to a maximum level of 0.05% is required only for unfilled grades. Higher levels can have a dramatic effect on both flow and mechanical properties.

Stanyl® is hygroscopic and absorbs moisture from the air relatively quickly. Although Stanyl® absorbs more moisture than PA66, the resulting dimensional change at equilibrium is of a similar order. At room temperature moisture absorption will lower stiffness and strength while increasing toughness. At temperatures above 75 °C (the glass transition temperature of Stanyl®) the effect of moisture absorption on the stiffness of Stanyl® is negligible.

#### DRYING CONDITIONS

Moisture content	Time	Temperature
0.1-0.2%	2-4 h	80 °C
0.2-0.5%	4-8 h	80 °C
> 0.5%	100 h	80 °C
	or 24 h	105 °C

Should moisture absorption occur prior to molding, there can be an adverse effect on the quality of the molding. During storage, containers should be kept closed and undamaged. During molding the following measures are recommended:

- preheat the hopper
- open the container just before filling the hopper
- close the container securely if all the contents have not been used
- keep the hopper closed
- bring cold granules up to ambient temperature in the molding shop while keeping containers shut.

**Regrind:** Regrind can often be a source of processing problems. The keys to successful use of regrind are: particulate size similar to that of the virgin pellets; regrind is kept clean and dry.

**Safety:** Under normal conditions, Stanyl® does not present a toxic hazard through skin contact or inhalation. During processing, contact with the polymer melt and inhalation of the fumes should be avoided. Please get in touch with your local DSM Sales office for Material Safety Data Sheets if required.

#### DSM Sales Offices

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