SS – 88: HDPE WAX STANDARD SPECIFICATION

1) **PRODUCT DESCRIPTION**: secondary product resulted from the polymerization of ethylene at low pressure

2) **APPLICATIONS**: waxes

3) **PROPERTIES**:

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>MU</th>
<th>LIMITS</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPECT:</td>
<td></td>
<td>Waxy and sticky matter/Flakes with variable colour white-yellow-grey-brown</td>
<td>VISUAL</td>
</tr>
<tr>
<td>PHYSICAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>°C</td>
<td>45 - 115</td>
<td>Met. RP</td>
</tr>
<tr>
<td>Residual solvent content</td>
<td>% m/m</td>
<td>max. 4</td>
<td>SR EN 13628/1</td>
</tr>
</tbody>
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4) **QUALITY CONTROL**: Control is performed on lots.
   - Each lot will have maximum 5 tons.
   - During test operation, the product must comply all the parameters depicted in this standard specification.
   - In case of litigation, the quality will be done in the presence of the client representative, using the samples kept for those cases. The samples will be taken in accordance with the sampling procedure.

   **NOTE**: All tests are performed using the supplier’s testing machines.

5) **SAMPLING PROCEDURE**: Sampling is done randomly from max 3% of the total quantity of the lot.
   - Initial samples will be quantitative minimized by quarter reduction method to aprox. 0.5 kg.
   - Sampling is done in clean and dry polyethylene bags.
   - The bags containing the samples are sealed and labeled.

   **NOTE**: One sample is analyzed in the producer lab and the other will be kept for 3 months after delivery in the lab for control in case of litigation.

6) **DELIVERY**: PE bags/drums of approximately ~25 Kg/box.

7) **GUARANTEE**: The product is guaranteed 1 month after delivery under the recommended "handling, transport and storage" conditions, according to MSDS 12.

8) **VALABILITY**: The product is guaranteed 12 months after production date, under the recommended "handling, transport and storage" conditions, according to MSDS 12. It is possible to extend the validity of the product through a new quality evaluation and inspection.

9) **DOCUMENTS**: Certificate of conformity /Test report.

10) **HANDLING, STORAGE AND TRANSPORT INFORMATION**: According to "SAFETY DATA SHEET"-MSDS - 12. During the storage period, polyethylene has not to be exposed at UV radiation. Producer does not take any responsibility for damage caused by inadequate storage.

11) **OTHER INFORMATIONS**:

   The MSDS for HDPE-wax is available by Sales Marketing Rompetrol Petrochemicals offices for the customer's. The MSDS contains necessary information in order to ensure customers' own safe in handling and processing activity. The information below is related only to the delivered product. The further addition components requested by processing have their own documentation and the client must consult it.

   **Safety**
   HDPE-wax is a stable chemical compound at room temperature and under normal handling conditions induces no hazard. Product storage must be in accordance with MSDS procedure. The working people should avoid skin or eyes contact with molten polymer. Personal protective equipment considers gloves, boots, and apron for skin protection. In order to prevent eyes injury, safety glasses are indicated. Fabrication areas should be well ventilated. Workplace environments should be kept clean and free of dust.

   **Fire hazard**
   HDPE-wax is an inflammable substance. Under normal storage conditions there is no ignition hazard. In contact with flame it becomes soft, flows, ignites and burns until exhausting. Therefore it has to be handled and stored avoiding...
contacts with open flames or other ignition sources. While burning, it releases high heat and a dense black smoke. In closed areas, fire fighters must use self-contained breathing apparatus.

**Recycling**
HDPE-wax is not a recyclable material.

**Disposal**
Disposal of any wastes should respect all national and local valid regulations. The below information are related to HDPE-wax. The influence of the additives, fillers or other materials added by buyers must be taken into consideration using the related documentation. HDPE-wax can be disposed by controlled incineration, respecting valid regulations regarding gaseous emission or solid particles. Due to the high level of heat endured, incineration has to be done only in dedicated units.

The mission assumed by Rompetrol Petrochemicals is to build a strong partnership supplier/customer. Assuming this purpose, Rompetrol Petrochemicals intents to offer products of high quality for satisfaction of all customers’ needs and expectations, to keep permanently contact with clients in order to acknowledge processing troubleshooting, to ensure technical support to solve them, to develop new products for existing or potential markets. Rompetrol Petrochemicals recognizes community concerns regarding his potential impact activity on the environment and therefore encourages his customers to review their processes from the human health and environment point of view. In order to prevent using the products in manners for which they are not intended or tested, Rompetrol Petrochemicals offer to its customers product literature, including suitable Material Safety Data Sheet, that should be consulted prior to use its products.

**NOTE:** We do not undertake any responsibility or liability for using Rompetrol Petrochemicals’ products for other purposes than the ones recommended in this standard specification. It is the customer’s responsibility to inspect and test our products in order to assure himself as to their suitability for his intended use.

**NOTE REGARDING MEDICAL APPLICATION RESTRICTIONS:** Rompetrol Petrochemicals does not recommend any company product for applications that involve human tissues or internal fluids contacts - regardless of the contact length of time, for cardiac devices, for medical device components that support human life, as well as for applications that have connections with human reproduction.