PRODUCT DESCRIPTION
LOCTITE LIOFOL LA 7728 / LOCTITE LIOFOL LA 6028 has the following product characteristics:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Polyurethane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Type</td>
<td>Laminating adhesive</td>
</tr>
<tr>
<td>Condition</td>
<td>Solvent-free</td>
</tr>
<tr>
<td>Components</td>
<td>Two components - requires mixing</td>
</tr>
<tr>
<td>Application</td>
<td>Film/Film and Film/Foil laminates for food packaging</td>
</tr>
<tr>
<td>Performance</td>
<td>Standard</td>
</tr>
<tr>
<td>Cure</td>
<td>Room temperature cure after mixing</td>
</tr>
<tr>
<td>Appearance Base</td>
<td>LOCTITE LIOFOL LA 7728 clear to light yellow</td>
</tr>
<tr>
<td>Appearance, Hardener</td>
<td>LOCTITE LIOFOL LA 6028 clear to light yellow</td>
</tr>
<tr>
<td>Mix Ratio, parts by weight - Base : Hardener</td>
<td>100:80</td>
</tr>
<tr>
<td>Mix Ratio, parts by weight - Base : Hardener</td>
<td>100:60 (poly)</td>
</tr>
</tbody>
</table>

Application Areas:
LOCTITE LIOFOL LA 7728 / LA 6028 is suitable for the lamination of transparent, metallised films and foils for food packaging.

Product Properties:
Reaction of the two components produces an adhesive film with high polymer content which shows good adhesion on various substrates. The cured adhesive film is transparent, odorless, elastic and age-resistant.

TECHNICAL DATA
LOCTITE LIOFOL LA 7728:
- Component NCO component
- Solid Content, % 100
- Viscosity, Brookfield - LVDV, 40 °C, mPas: Spindle 3, speed 12 rpm 1,500 to 3,000
- Volumetric Density @ 25 °C, g/cm³ 1.18

Hardener LOCTITE LIOFOL LA 6028:
- Component OH component
- Solid Content, % 100
- Viscosity, Brookfield - LVDV, 25 °C, mPas: Spindle 3, speed 12 rpm 500 to 1,500
- Volumetric Density @ 25 °C, g/cm³ 1.11

Ready-to-Use Mixture:
- Viscosity, Brookfield - LVDV, 40 °C, mPas: Spindle 3, speed 12 rpm ~1,200
- Increase of Viscosity
  - after 30 minutes, mPas ~3,000
  - after 45 minutes, mPas ~4,500

Compliance with food packaging regulations:
LOCTITE LIOFOL LA 7728 / LA 6028 contains aromatic isocyanates. We therefore recommend migration testing of the fully cured material under conditions of use, particularly with high temperature applications, to demonstrate compliance with the limits for primary aromatic amines. The responsibility for compliance with the specific conditions is with the converter and not with the adhesive supplier.

DIRECTIONS OF USE
Preliminary Statement:
Prior to application it is necessary to read the Safety Data Sheet for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Protective Measures:
LOCTITE LIOFOL LA 7728 / LA 6028 contains polyisocyanates. To avoid the emission of volatile isocyanates into the working area the coating unit has to be equipped with an air-supplied hood. This will make sure that TLV-value (max. concentration in air) does not exceed its Limit. Safety regulations with regard to handling of isocyanates have to be followed as per the guide lines issued by the International Isocyanates Institute.
Application:
LOCTITE LIOFOL LA 7728 / LA 6028 can be applied on special laminating machines with multi-roller application system.

Application Weight:
The application weight may range from 1.5 to 3 g/m² dry depending on the film or foil combination and the intended use of the laminate. For printed laminates the weight has to be adjusted to higher weights accordingly, it should be approx. 0.5 g/m² higher than for unprinted films.

Dosing:
The adhesive is continuously added in the gap of the application station with a two-component dosing and mixing unit. The amount of adhesive in the gap should be kept on the lowest possible level.

Increase of viscosity:
Please refer to the Technical Data section of this datasheet.

Working Conditions:
Precise web tension control together with a suitable winding program helps to avoid tunneling as well as telescoping and curling effects.

Cleaning:
In case of a machine stop (for more than 30 minutes) the coating unit has to be cleaned with solvents/plasticizer-mixture (observe safety precautions) or products of the LOCTITE LIOFOL CL range (separate datasheets available upon request). Ventilation should run continuously during the cleaning. The same cleaning procedure has to follow at the end of the run.

Curing:
The laminates may be rewound and slit after 1 to 2 days. Manufacture of triplex laminates is possible 24 hours after duplex production. Complete curing i.e., total resistance to severe environments will be achieved after 7 to 14 days of storage at room temperature depending on film combination and intended use of the laminates.

STORAGE
When stored in a dry and cool place in the original unopened container storage life is as follows. Once opened, containers have to be tightly reclosed immediately and consumed within a short time span.

  Shelf life:
  LOCTITE LIOFOL LA 7728, months: 9
  LOCTITE LIOFOL LA 6028, months: 9

Classification:
Please refer to the corresponding safety data sheets for details on:
  Hazardous Information
  Transport Regulations
  Safety Regulations

ADDITIONAL INFORMATION
Disclaimer

Note:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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