

1. Area of application and purpose

This standard applies for Bühler Alzenau as well as all suppliers.

The lacquer of this standard is used for the internal coating of Bühler Alzenau vacuum chambers and containers and their internals. The standard provides technical information on the properties, technical data and processing of the coating.

For coating of surfaces outside the vacuum chamber, the factory standard LHH-N 120.010 is valid.

2. Properties

The CETELON D/D topcoat is a 2-component coating of class 200 and is used as a resistant coating for heavy-duty machinery and equipment. The coating has good resistance properties against damp influences and is highly weather-resistant.

It is highly resistant to high concentrations of acids and alkalis, as well as oils and greases. The lacquer is also very hard, has a smooth surface and is scratch-resistant. The lacquer is also food safe.

3. Technical Data

| Basis | Polyurethane isocyanate | |
|------------------------------|--|-----------------|
| Color | RAL 9002 grey-white, glossy | |
| Long-term thermal resistance | max. 130°C | |
| Solid state | approx. 60 weight % | DIN EN ISO 3251 |
| Thickness | approx. 1,1 - 1,2 g/cm3 at 20°C | DIN EN ISO 2811 |
| Delivery viscosity | 70 s | |
| Flashpoint | above 21°C | DIN EN ISO 1523 |
| symbol according to working | AII | DIN EN ISO 1516 |
| substance | not applicable | |
| Shelf life | 6 months | |
| Manufacturer | CETELON Lackfabrik Boschstraße 1 71254 Ditzingen | |

| Standardisation | Revised by: Moser | Edition | | | |
|-----------------|-------------------|---------|---------|--|--|
| | Checked by: Merz | 10-2023 | 05-2024 | | |



Coating the interior of vacuum containers with CETELON D/D topcoat

4. Application

The surface should be free of dirt, rust and grease and absolutely dry. Cetelon D/D lacquer is sensitive to water in any form and humidity. This must also be taken into account when storing the lacquer.

Keep tools and spray air dry.

It can be applied by rolling, brushing, spraying or flooding.

| Mixing ratio lacquer : hardener | 10 : 3 weight proportion |
|---|--------------------------------------|
| Spray viscosity | 17 - 22s, DIN cup 4mm - 20°C |
| Thinner additive | max. 10% |
| Drops time | 4 - 6 h at 20°C |
| Work tools | Spray gun e.g. SATA GR/Z or SATA jet |
| Spray pressure | 3-5 bar |
| Spray nozzle | 1,5 mm |
| Spray application | 1,5 to 2 cross coats |
| Spray distance | approx. 30 cm |
| Dry layer thickness | 30-40 μm |
| Air curing • dust dry • touch dry • completely dry | 1 h 8 h 24 h |
| Oven drying • airing time • fully dried | 20 min 40 min/80°C |
| Consumption at 40 µm layer thickness | approx. 5 m ² /kg |
| chemical and physical resilience | after 7 days |

| Standardisation | Revised by: Moser | Edition | | | |
|-----------------|-------------------|---------|---------|--|--|
| | Checked by: Merz | 10-2023 | 05-2024 | | |

| | Coating process | LHH-N |
|---------|---|-------------------------|
| CBUHLER | Coating the interior of vacuum containers with CETELON D/D topcoat | 120.016 Seite 3 v. 3 |

5. Vacuum Data

| Outgasing of a painted surface | 1- 2 x 10 ⁻⁶ mbar x l x s ⁻¹ x cm ⁻² | | |
|--------------------------------|---|--|--|
| Pumping time | 1 h | | |

6. Description

| | Model no. | Item no. | Pack size |
|---------------|----------------|----------------|-----------|
| Basic lacquer | 254/009 002/00 | LOAT-11364-001 | 25 kg |
| Hardener | 065/000 133/00 | LOAT-11365-001 | 10 kg |
| Thinner | 001/000 111/00 | LOAT-90165-001 | 10 |

7. Information in design documents

The parts or part surfaces to be painted must be marked according to the surface symbols.

Specification:

Lackiert nach painted according to LHH–N 120.016

| Standardisation | Revised by: Moser | Edition | | | | |
|-----------------|-------------------|---------|---------|--|--|--|
| Standardisation | Checked by: Merz | 10-2023 | 05-2024 | | | |