Concentrated or hazardous chemical formulations need packaging that breathes without leaking, to equalize pressure imbalances that would otherwise deform the container and cause dangerous spills or costly returns. GORE® Packaging Vents minimize these risks with a breathable barrier membrane that reliably maintains container integrity – and consistently passes DOT and ADR requirements.

**Plug-In Vents**

- **D38/D17/D15**: One of our most robust, reliable vents for the most aggressive industrial chemicals and “dangerous goods” packaging. Optimized for ADR Drop Test Specifications.
- **D15 Converse**: For cartridges or other packaging that require exterior vent integration. Ideal for dosing/dispensing applications.
- **D10/D6**: A high-performance, small-footprint vent designed to enhance safety, sustainability and savings in applications like dispensers for household or institutional cleaners.
- **D3**: Equalizes pressure ONLY from the outside to the inside, for specialty applications including the smallest cartridges/dispensers that don’t off-gas, but need pressure-balancing for product flow.

**Liners**

- **NEW Foam Liners**: Two Series, with full-surface membranes, for all flat-cap designs. Easy drop-in replacements for all single-point or unvented liners, in applications from consumer chemicals to DOT and ADR-regulated packaging.
- **Pulp Induction Liners**: Two Series, for agrochemical bottles (up to 5 l). Weldable installation ensures tamper-evidence; membrane construction provides needed breathability for gas-scavenging chemicals and off-gassing liquids.

**Benefits of Plug-In Vents:**

- Meet the demanding needs of nearly all hazardous chemicals and cleaners.
- D38/D17/D15 consistently demonstrate compliance with ADR test standards in varied container systems.
- Easy to integrate via snap-fit or press-fit.

**Benefits of Liners:**

- Developed for fertilizer, pesticides and household chemicals and cleaners.
- Easy to integrate without re-design of cap.
- All liners are available in single- and multi-up roll goods as well as in various widths.
### Plug-In Vents

<table>
<thead>
<tr>
<th>Packaging Application</th>
<th>IBCs / Drums</th>
<th>Drums / Containers</th>
<th>Containers / Bottles</th>
<th>Cartridges</th>
<th>Dispensers / Bottles</th>
<th>Trigger Sprays / Bottles</th>
<th>Specialities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Size</td>
<td>60 – 1500 liters</td>
<td>5 – 60 liters</td>
<td>1 – 30 liters</td>
<td>1 – 5 liters</td>
<td>0.2 – 2 liters</td>
<td>0.2 – 1 liters</td>
<td>0.2 – 1 liters</td>
</tr>
</tbody>
</table>

### Vent Design and Dimensions

<table>
<thead>
<tr>
<th>Vent Design and Dimensions</th>
<th>Units are in mm</th>
<th>Dimensions without tolerances follow DIN 16743</th>
</tr>
</thead>
</table>

### Quality Assurance for Plug-In Vents

- **In-line airflow test**: (Not applicable to D10, D6 and D3) 100% of the vents are airflow-optimized during production. This ensures that every part meets the specified airflow requirements.
- **In-line camera test**: (Not applicable to D6) 100% optical testing ensures that the membrane is integrated properly and is free of defects.
- **Water entry pressure test**: WEP testing allows more control of the membrane integration process and also verifies the membrane’s water entry pressure resistance.
- **Tracking**: Each D38, D17 and D15 vent is laser-marked with an individual tracking code. This enables Gore to reference the actual production data at any time.
- **Drop Test**: (Not applicable to D10, D6 and D3) Compliant with European ADR standard 6.1. Do not wash or re-use, for single use only.

### Order numbers...

- **... for Press-Fit Integration**: CMF300147 CMF300207 CMF300277 CMF300176 CMF300181 CMF300275 CMF300223 CMF300274 CMF300223 CMF300261 CMF300246
- **... for Snap-Fit Integration**: CMF300197 CMF300206

### Product Performance Characteristics

- **Membrane Type**: Gore™
- **Membrane**: GORE™
- **Vented housing**: ePTFE
- **Material**: PE/PP

### Typical Application

- **IBC / Drums**: 60 – 1500 liters
- **Drums / Containers**: 5 – 60 liters
- **Containers / Bottles**: 1 – 30 liters
- **Cartridges**: 1 – 5 liters
- **Dispensers / Bottles**: 0.2 – 2 liters
- **Trigger Sprays / Bottles**: 0.2 – 1 liters
- **Specialities**: Applications requiring underpressure-compensation or vacuum-elimination

### Vent Housing

- **Material**: HDPE

### Specifications

<table>
<thead>
<tr>
<th>Product Series</th>
<th>D38</th>
<th>D17</th>
<th>D15</th>
<th>D15 Converse</th>
<th>D10</th>
<th>D6</th>
<th>D3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Content</td>
<td>Agrochemicals</td>
<td>Hazardous</td>
<td>Chemicals</td>
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<td>Hazardous</td>
<td>Chemicals</td>
<td>Agrochemicals</td>
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<tr>
<td>Order numbers</td>
<td>CMF300167</td>
<td>CMF300217</td>
<td>CMF300277</td>
<td>CMF300176</td>
<td>CMF300181</td>
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<td>CMF300206</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Dimensions

- **Press-Fit Integration**: D38: 13.00 x 0.10, D17: 17.30 x 0.10, D15: 13.00 x 0.10
- **Snap-Fit Integration**: D38: 13.00 x 0.08, D17: 17.30 x 0.08, D15: 13.00 x 0.08

### Water Entry Pressure Test (WEP)

- **Water entry pressure**: > 0.5 bar, > 0.6 bar, > 0.3 bar

### Traceability

- **Yes**: Individually laser-marked
- **On lot level**: Yes

### Membrane Type

- **SEO**: SCS, SGS, SCN
- **SCS**: SCS
- **SDS**: SFS, SHD
- **SC**: SCS
- **SE**: SCS
- **SG**: SGS
- **SEPC**: SEPC
- **SGPC**: SGPC
- **SEPP**: SEPP
- **SGPP**: SGPP

### Membrane Type

- **Membrane**: GORE™
- **Material**: PE/PP, ePTFE

### Packaging Content

- **Agrochemicals**: Hazardous
- **Chemicals**: Hazardous
- **Industrial Cleaners**: Hazardous

### Packaging Size

- **60 – 1500 liters**: IBCs / Drums
- **5 – 60 liters**: Drums / Containers
- **1 – 30 liters**: Containers / Bottles
- **1 – 5 liters**: Cartridges
- **0.2 – 2 liters**: Dispensers / Bottles
- **0.2 – 1 liters**: Trigger Sprays / Bottles
- **Applications requiring underpressure-compensation or vacuum-elimination**
Typical Application Bottles

Packaging Content Hazardous Chemicals, Institutional Cleaners and Liquid Fertilizer

Household Chemicals and Agrochemicals

Agrochemicals

Product Family Foam Liner Pulp Induction Liner

Product Series

High Roll-Off Series Standard Series Low Diffusion Series Standard Series

Order Numbers

CM700363G CM700323G CM6B CM6C

Product Performance Characteristics

Typical Airflow at dp = 12 mbar 0.4 l/h/cm² 0.4 l/h/cm² 0.03 l/h 0.04 l/h

Water Entry Pressure (WEP) > 2.7 bar > 1.4 bar > 0.5 bar > 0.5 bar

Drop-Test Optimized* Yes No No

Traceability On lot level On lot level

Membrane Liner Construction ePTFE | PE foam ePTFE | PE + aluminium + PET + wax + pulp

Thickness [mm] 1.1 1.0

Venting Hole Diameter [mm] the whole liner surface is breathable 0.6 2.0

Venting Method cap thread venting (venting through hole in cap also possible) cap thread venting (venting through hole in cap also possible)

All liners are available in single- and multi-up roll goods as well as in various widths. Cut parts can also be offered.

* Drop Test: compliant with European ADR standard 6.1

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