

GRIVORY HB

**High barrier polyamides
from EMS-GRIVORY**

GRIVORY HB 5299

Product	Description
GRIVORY HB5299	semi-crystalline T_g (dry) = 96°C, T_m = 219°C, E-Modulus = 4100 MPa (dry)

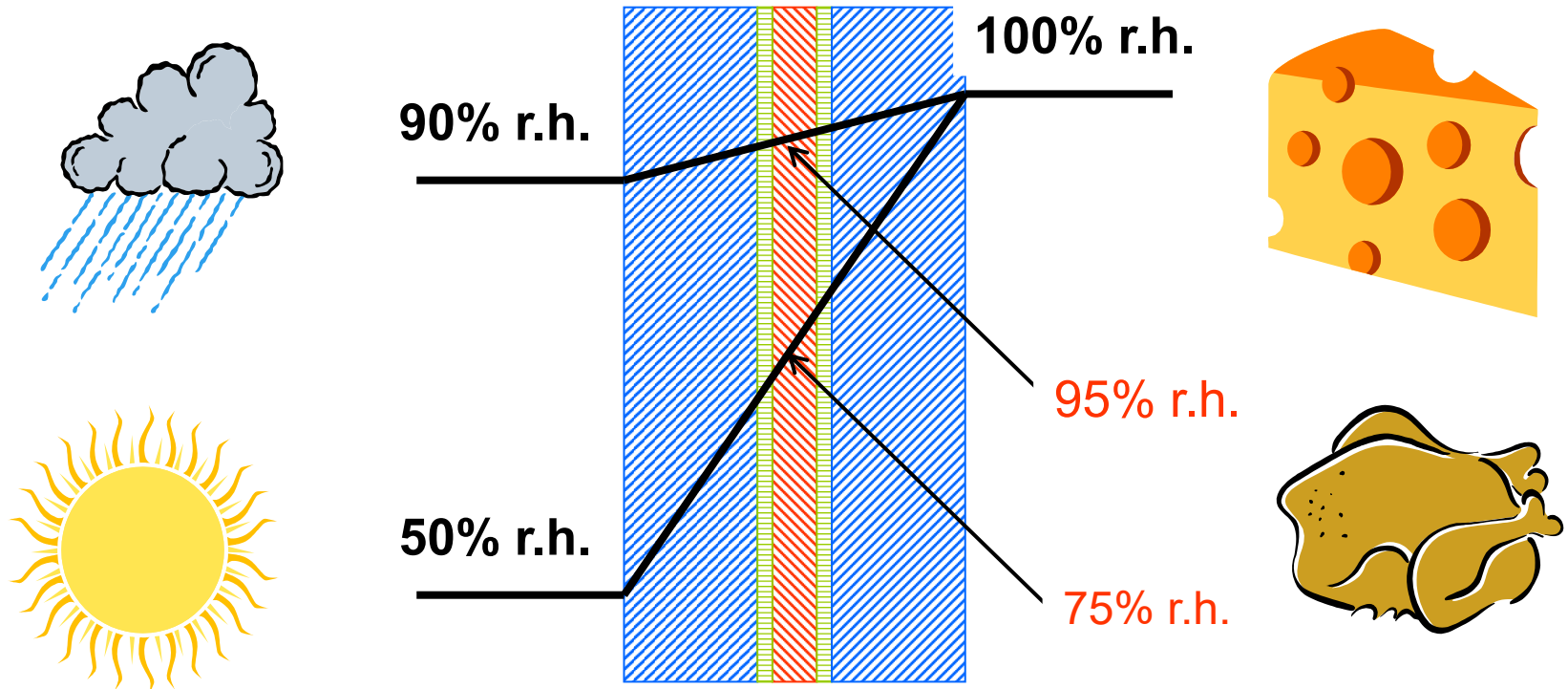
- Shows excellent O₂ / CO₂ barrier between 80 and 100% r.h.
- Is a highly transparent material
- Increase the stiffness of multi layer film structures at elevated temperature (for better printability)
- Improves in dry-blends with PA6 barrier, optical and mechanical properties, especially at elevated temperatures
- Provides best barrier after sterilisation

Barrier Conditions

Outside

Inside

PE Barrier PE



Comparison of OTR

Tested Structure:

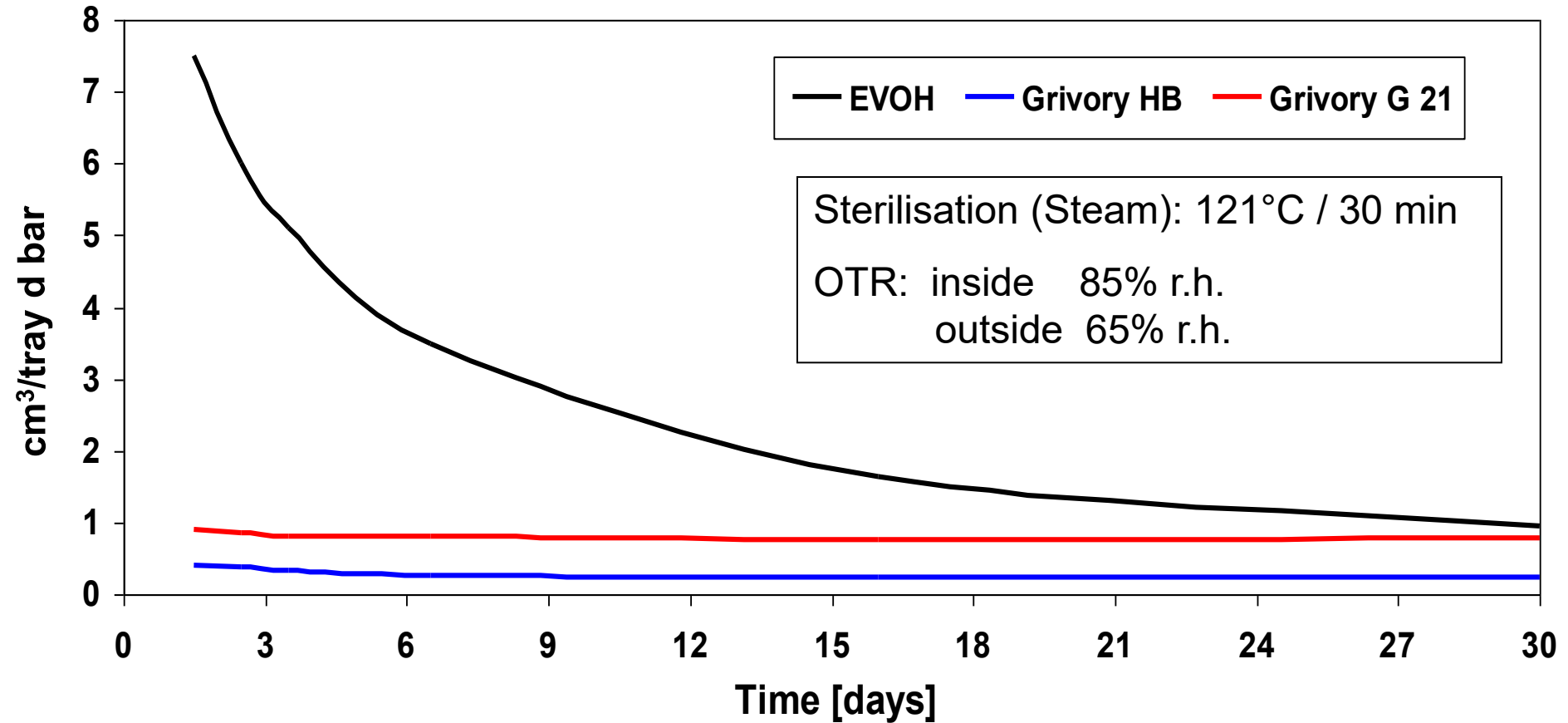


PP (random)	27μm
Tie	6μm
Barrier	6μm
Tie	6μm
PP (homo)	27μm

Material	OTR cm ³ /m ² db			
	23°C/50% rh	23°C/85% rh	23°C/95% rh	35°C/95% rh
EVOH 32mol% *	2.5	32	175	395
Grivory HB 5299	16	17	32	93

* EVOH new retort grad

OTR after Retort



Influence of sterilisation:

- EVOH distinctly lost barrier (retort shock!)

Why Grivory HB?

- **Excellent barrier especially in a high humidity environment**
- **No retort shock – best barrier after sterilisation**
- **Due to higher mechanical properties it offers significantly better converting behaviour (e.g. printing)**
- **In dry blends with PA6 and CoPA's orientability and thermoforming are improved**
- **PA6/GRIVORY HB blend shows furthermore distinctly improved barrier performance, especially at elevated relative humidity**