

Draft

Packaging Material Brief

Material Description	Name of the material - Acronym (if it exists) – Category
Applications	<ul style="list-style-type: none"> • Significance of this material in industry: _____(units/year or tons/year) Source of Information: (Reference) Date:___/___/___ • Major packaging process applications include: Source: (Reference) • Examples of packages obtained from this material:(list some examples) • Other major applications of this material in industry besides packaging include: Percentage: Source: (Reference)
Physical Properties	<p>Basic performance characteristics: <i>For raw materials:</i></p> <p>Brightness: (based in ASTM D985-97(2002)/ISO2470:1999 and ISO 2469)</p> <p>Burst Strength at yield, (psi.): (Based in ASTM D-638)</p> <p>Carbon Dioxide transmission rate (cm³/m²/day) (°C, % RH):</p> <p>Density (Kg/m³)/ (lb/in³):</p> <p>Dimensional Stability: (Represents the relationship of a material to temperature, moisture, pressure and stress) (Including: HDT (Heat Distortion Temperature) or DTUL (Deflection Temperature Under Load), °C / °F, at 66psi.(Based in ASTM D-648 and 1204 for plastics):</p> <p>Flexural Modulus, psi: (Based in ASTM D-790)</p> <p>OTR (Oxygen transmission rate) (cm³/m²/day) (at 100% O₂, 23°C, 0% RH): (Based in ASTM D-3985, plastics)</p> <p>Optical Clarity, (% per mil.) (if applies):(Relates to wavelength transmission)</p> <p>Porosity %(air permeability): (based in ISO 5636-1:1984)</p> <p>Puncture Resistance: (Based in ISO)</p> <p>Stiffness (Newtons/Meter): (based in ISO 2493/ASTM D5342 and ASTM D5650)</p> <p>Tensile Elongation at yield, %. (Based in ASTM D-638)</p> <p>Thickness(in/mm):</p> <p>WVTR (Water Vapor Transmission Rate), gms-mil/sq-Meter/day @37.8°C, 90% RH. (Base in ASTM E-398):</p>

For packaging applications:

Common additives used (if applies):(e.g. antioxidants, heat stabilizers, UV stabilizers, antistatic agents, pigments, etc)

Note: The units can vary depending on the material

Comments:

Environmental performance and impacts

LCI Data

Emissions factor for:

Virgin material:

Recycled material content:

Industry average, post-consumer recycle content:

- Total energy required for raw material manufacture (Megajoules/Kg):
- Green House Emissions (normalized to CO2):
- Waste per kg of material produced:

Note: Last 3 bullets above will be filled when LCI is completed.

End-of-life packaging issues:

- **Landfill** (What happens when it goes to a landfill?) (Data provided by EPA):
- **Recycling** (Is this material recyclable? What is the current recycle rate?) (Data provided by EPA):
- **Combustion** (The % of this material that is currently being incinerated or going to WTE)(Data provided by EPA):
- **Litter** (The % of this material)(Data provided by Keep America Beautiful):
- **Composting/Anaerobic Digestion** (The % of this material that is currently being composted or digested) (Data provided by EPA):

(Base on ASTM D6400 or ASTM D6868 - applicable for paper and plastics)

7 R's of Packaging

Reduce

Name some examples that apply to this material/applications on packages :

Source: (Reference)

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Reuse	Name some examples of how this material can be reused for other applications: Source: (Reference)
Recycling Data	<i>Read above LCI data</i> Material identification (SPI code if applies): It is possible that your material could be recycled with others materials. Please name materials that could be compatible for recycling:
Renew	Percentage of renewable content in this material (based on ASTM D6866): _____%
Remove	Name some examples that apply to this material/applications on packages (if applies): Source:
Revenue	Describe the material's current revenue situation in the market (could be virgin or recycle, specify which one): Raw material prices according to _____ Market Date: ___/___/___
Read	Information from trade associations, organizations, government agencies and other sources. Published papers, websites and recommended literature.

References:

Methods Applied (ASTM and ISO)