### **Pope Packaging Papersacks**





# **The Solution** The **ENVIROBARRIER**<sup>™</sup> Bag

#### The Australia's First 100% Recyclable

### Patented 100% Bio-Degradable

#### **Moisture Resistant Paper Sack**



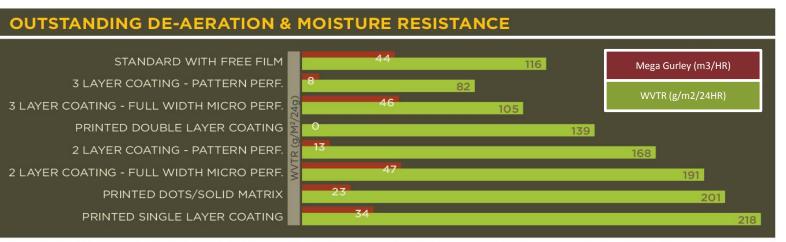


**The Benefits** The **ENVIROBARRIER**<sup>™</sup> Bag **Improved shelf life USFDA** approved **Improved filling speeds Reduction in landfill Positive customer and consumer response** 





# Mondi R&D Test Results



Air resistance (the time taken for air to pass through a paper structure such as a paper sack) is measured in Mega Gurley seconds. Water Vapour Transmission (WVTR) is a measure of humidity and moisture resistance.





## Biodegradability Assessment Been Conducted at CSIRO

Testing is conducted to a standard (AS 4736 & EN 14332)

### 5 key areas are

Heavy Metal Concentration (In 14 days)

Biodegradation (In 45 days)

Disintegration (In 98 days)

Plant Toxicity (In 14 days)

Worm Toxicity Test (AS 4736 only) in 14 days





### **ENVIROBARRIER™ CSIRO AS4736 Certified**



#### AS4736 Testing of Brown Sack Kraft Paper Bag

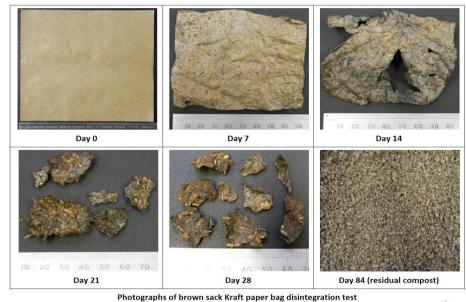
#### A summary of test results<sup>1</sup>

CSIRO MANUFACTURING

www.csiro.au

Brown sack Kraft paper bag was evaluated according to Australian Standard AS4736, and the test product met the performance requirements for; characterisation, disintegration and aerobic biodegradability. A similar Kraft paper product<sup>2</sup> was assessed separately for ecotoxicity and met the AS4736 requirements. Based on these test results, it is assumed that brown sack Kraft paper bag should also meet the ecotoxicity criterion of AS4736.

AS4736 assessment	Criteria	Pass/Fail
Characterisation	Test material shall contain >50% volatile solids content, concentration of heavy metals and toxic substances shall be within maximum permissible limit	Pass
Disintegration	Not more than 10% w/w (dry weight) of the original dry weight of test material shall fail to pass through a 2mm fraction sieve (ISO 16929)	Pass
Aerobic Biodegradability	Test material shall degrade at least 90% w/w (dry weight) in total or of the maximum degradation of a suitable reference substance (AS ISO 14855)	Pass



 $^1$  Extract from CSIRO report No. EP153063. NATA Lab Accreditation No. 15725  $^2$  CSIRO report No. EP153060













## ENVIROBARRIER<sup>™</sup> Australian Packaging Awards – 3 Gold awards







### **ENVIROBARRIER™ World Star Award**







