

1. Introduction

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PET is an abbreviation for polyethylene terephthalate. It is a type of plastic which can be made into various shaped containers by the process of blow moulding. It has found to be particularly suitable in the beverage industry to pack carbonated and still soft drinks, sports drinks, juice, milk and tea. Many other industries pack with PET containers.

PET has not been widely used in the packaging of wine because PET is semi permeable to oxygen. Recently it has been possible to incorporate an oxygen scavenger in PET during manufacture. The oxygen scavenger is depleted by its contact with oxygen which imposes a shelf life on the container.

The suitability of PET as a container for wine was studied in this report.

Although a wide range of container size, shape and colour are possible with PET it was decided to limit this study to the use of 187mL claret shaped containers. The reasons for this choice include:

- 1 A supply was available of that size container, complete with oxygen scavenger.
- 2 The suitability of 187mL bottles for 'single serve' packaging which is the fastest growing segment of beverage container sales.
- 3 Portavin Melbourne (PVM) was able to handle 187mL glass bottles, albeit that they were burgundy not claret in shape.

Characteristically, single serve PET bottles are portable, lightweight, shatter resistant, strong and re-sealable ensuring their relevance in our increasingly mobile and convenience focused society.

Wine in single serve PET bottles would be particularly suited for consumption in places where large quantities of beverage are required to be served in limited time, such as large entertainment venues. The weight advantage of PET compared to glass suggests it may have application in the service of wine on aircraft and places where freight cost savings might be desirable. Furthermore there may be a safety aspect to favour the use of PET compared to glass in the airline industry and at large entertainment venues.