



# INJECTION MOULDING

To complement their standard range of containers, Spectra also supplies innovative quality closures which provide their customers with that total packaging solution.

Spectra produce caps which not only fit their range of containers beautifully, but also their customers needs too - with a bespoke closure service aimed at delivering truly individual results for a wide range of markets.

What's more, Spectra's flexible approach also enables customers the opportunity to own closure moulds outright or simply benefit from partial tooling exclusivity. This is dependant on specific markets or particular circumstances.

Customers can also take advantage of Spectra's market knowledge, with a range of added value benefits. These include polymer colouring expertise which produces stunning results for a variety of

effects such as metallics or pearls, as well as exact colour matching. This is reinforced with guidance and technical assistance on a number of closure issues from design and materials to choosing the ideal cap for a particular bottle type.

## WHAT IS INJECTION MOULDING?

Injection moulding is the process of manufacturing highly accurate plastic components such as closures, overcaps and reducing plugs.

Plastic resin is fed into a heated barrel and screw which is then injected at high pressure into a water cooled mould which

may consist of various moving parts.

Due to the high injection pressures this cavity will be held together by the use of a clamping unit. While the plastic is held inside the mould, the plastic will freeze off to the desired shape. After the plastic has cooled sufficiently the mould and clamping unit will open and allow the finished component to be ejected so that the process can be repeated.



## WHAT ARE THE BENEFITS OF PP AS A MATERIAL?

Generally PP is advantageous when being used in conjunction with a dissimilar bottle material ie HDPE / PVC / PETG as it will improve any binding issues between the 2 components.

# STANDARD CLOSURE RANGE

In addition to the comprehensive collection of standard bottles, Spectra can also provide a range of innovative quality closures enabling that total packaging solution. These caps not only fit and complement the range of containers beautifully, they also complement customers needs too - with a bespoke closure service aimed at delivering truly individual results for a wide range of market sectors.



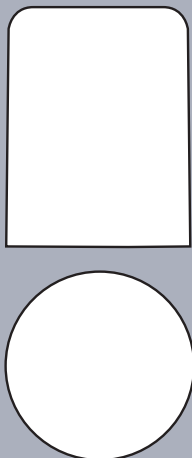
## TALL RADIUSED CAPS

Designed to fit a variety of HDPE and PET Bottles from our ranges.

### 24/415 TALL RADIUSED CAP

Cap Reference .....3011  
Height .....36mm  
Diameter .....27mm  
Neck Finish .....24/415  
Finish .....Gloss

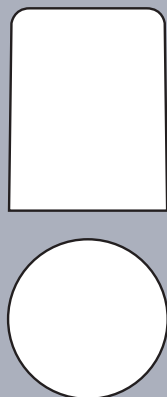
This cap features a spigot seal



### 20/415 TALL RADIUSED CAP

Cap Reference .....3013  
Height .....30mm  
Diameter .....23mm  
Neck Finish .....20/415  
Finish .....Gloss

This cap features a spigot seal



## SHALLOW CAPS

Designed to fit a variety of HDPE and PET Bottles from our ranges.

### 20/415 SHALLOW CAP

Cap Reference .....3004  
Height .....21mm  
Diameter .....24mm  
Neck Finish .....20/415  
Finish .....Gloss

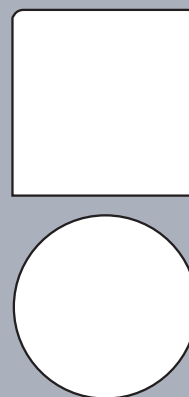
This cap features a spigot seal



### 24/410 SHALLOW CAP

Cap Reference .....3022  
Height .....27mm  
Diameter .....28mm  
Neck Finish .....24/410  
Finish .....Gloss

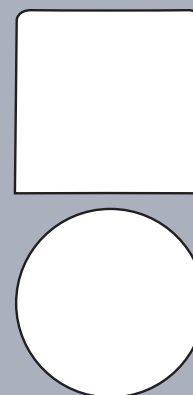
This cap features a spigot seal



### 24/415 SHALLOW CAP

Cap Reference .....3005  
Height .....27mm  
Diameter .....28mm  
Neck Finish .....24/415  
Finish .....Gloss

This cap features a spigot seal

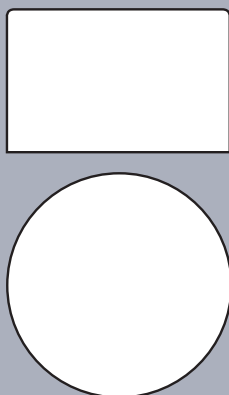


## DOUBLE WALL CAPS

Designed to fit a variety of HDPE and PET Bottles from our ranges.

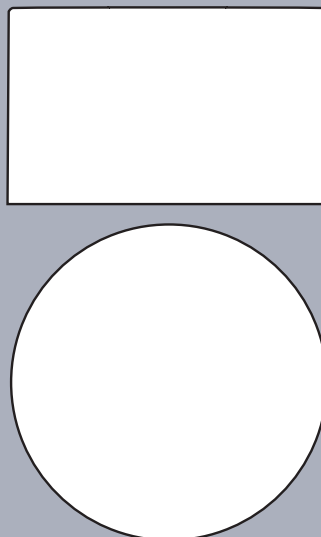
### DOUBLE WALL CAP

Cap Reference .....3001  
Height .....21mm  
Diameter .....33mm  
Neck Finish .....20/415  
Finish .....Gloss



### DOUBLE WALL CAP

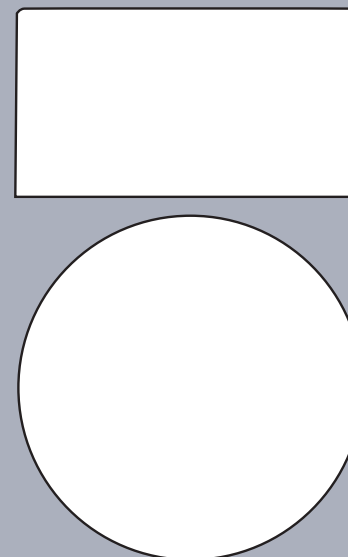
Cap Reference .....3014  
Height .....29mm  
Diameter .....47mm  
Neck Finish .....24/415  
Finish .....Gloss



### DOUBLE WALL CAP

Cap Reference .....3002  
Height .....27mm  
Diameter .....51mm  
Neck Finish .....24/415  
Finish .....Gloss

This cap features a spigot seal

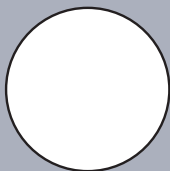
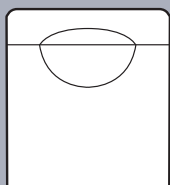


## FLIP TOP CAPS

Designed to fit a variety of HDPE and PET Bottles from our ranges.

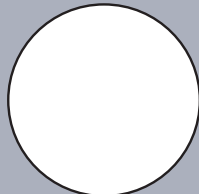
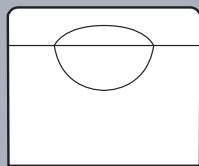
### 20/415 FLIP TOP CAP

Cap Reference .....3018  
 Height .....26mm  
 Diameter .....24mm  
 Neck Finish .....20/415  
 Finish .....Gloss



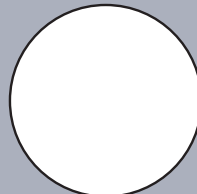
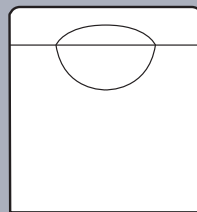
### 24/410 FLIP TOP CAP

Cap Reference .....3017  
 Height .....23mm  
 Diameter .....28mm  
 Neck Finish .....24/410  
 Finish .....Gloss



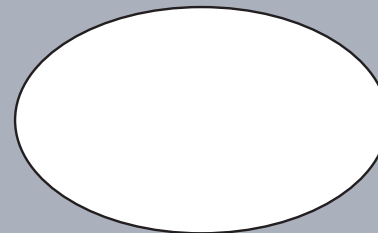
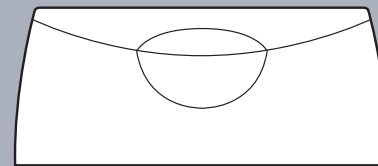
### 24/415 FLIP TOP CAP

Cap Reference .....3016  
 Height .....30mm  
 Diameter .....28mm  
 Neck Finish .....24/415  
 Finish .....Gloss



### OVAL FLIP TOP

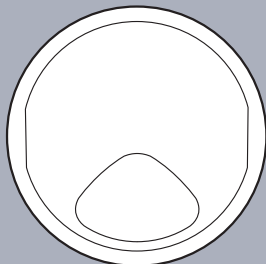
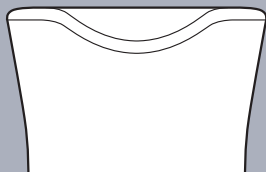
Cap Reference .....3030  
 Height .....23mm  
 Major/Minor Axis .....55x34mm  
 Neck Finish .....Snap-On  
 Finish .....Gloss



## FLARED DISC TOP

### 24/410 FLARED DISC TOP

Cap Reference .....3026  
 Height .....26mm  
 Major/Minor Axis .....41x34mm  
 Neck Finish .....24/410  
 Finish .....Satin



## REDUCER PLUGS

### 24mm REDUCER PLUG

Cap Reference .....3998  
 Height .....10mm  
 Diameter .....19mm  
 Neck Finish .....24mm  
 Finish .....Gloss



### 20mm REDUCER PLUG

Cap Reference .....3999  
 Height .....10mm  
 Diameter .....14mm  
 Neck Finish .....20mm  
 Finish .....Gloss



## COLOUR OR FINISH YOUR CLOSURE FOR MAXIMUM IMPACT

For a totally individual packaging solution, our closures can be exact colour matched to compliment our extensive range of bottles.

In addition, Spectra can also provide a number of innovative finishing touches such as peripheral foil banding which will give your products a luxurious premium feel.

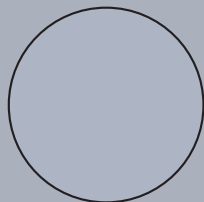
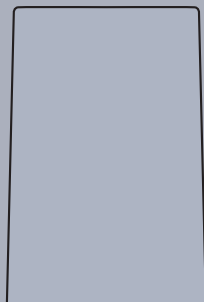
To find out more on Spectra's colouring and decoration services see pages 22 - 24.

## NON AEROSOL OVERCAPS

Designed to fit a variety of HDPE and PET Bottles from our Tubular range. Our range of Non Aerosol Overcaps are available in either gloss and matt.

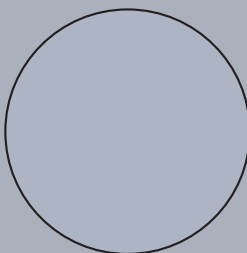
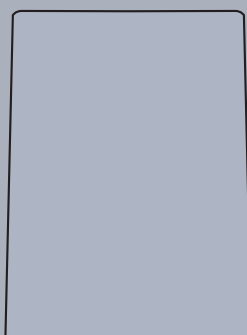
### NON AEROSOL OVERCAP

Cap Reference .....3009  
 Height .....49mm  
 Diameter .....33mm  
 Neck Finish .....Snap-On  
 Finish.....Gloss or Matt



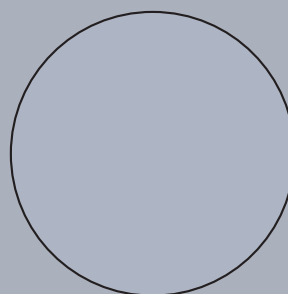
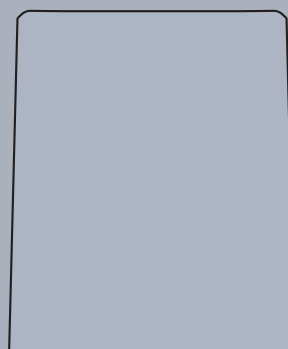
### NON AEROSOL OVERCAP

Cap Reference .....3003  
 Height .....54mm  
 Diameter .....41mm  
 Neck Finish .....Snap-On  
 Finish.....Gloss or Matt



### NON AEROSOL OVERCAP

Cap Reference .....3000  
 Height .....57mm  
 Diameter .....47mm  
 Neck Finish .....Snap-On  
 Finish.....Gloss or Matt



### NON AEROSOL OVERCAP

Cap Reference .....3010  
 Height .....57mm  
 Diameter .....51mm  
 Neck Finish .....Snap-On  
 Finish.....Gloss or Matt

