



PET Approval

Lube H1 PET Approval

This documents outlines the approval and test procedures carried out on PET bottles with Conveyor Lube H1.

Dry Lube Ltd.



CONSTAR INTERNATIONAL UK LIMITED

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2nd September 2003

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Dear Sirs,

Re. Conveyor Lube H1

Concerning our telephone conversation dates 01.09.03, I can confirm that a sample batch of Conveyor Lube H1 has been tested in June 2003 using PET bottles which were supplied by two of our customers, CCE and Britvic Soft Drinks.

The testing was carried out using bottles supplied by our customers against our standard test method of which a copy is enclosed.

The testing was carried out at the recommendation concentration level of 100% neat, i.e. not diluted.

All the bottles tested passed satisfactorily with no evidence of any stress cracking or base deformity after the specific period.

It is therefore considered that Conveyor Lube H1 is classed as acceptable for use on PET bottle filling lines.

Yours Sincerely,


Ian Rawlings

Registered in England No. 2407933





TEST METHOD

TEST METHOD TO BE USED TO DETERMINE THE ACCEPTABILITY OF LINE LUBRICANTS WHICH CAN BE USED ON FILLING LINES AND USED ON CONSTAR BOTTLES.

The Line Lubricant will normally be supplied to Constar by the manufacturer with a written request for testing to be carried out, although this request can occasionally be made by Constar's customer. A product safety data sheet and Intended usage concentration percentages must also be supplied to enable accurate testing to be carried out.

IMPORTANT SAFETY REQUIREMENT

READ ALL THE SAFETY DATASHEETS AND ENSURE THAT ALL THE PERSONAL PROTECTIVE EQUIPMENT IS BEING USED WHILST CARRYING OUT THE TESTING

TEST METHOD

- 1) Take six bottles for each level of Line Lubricant concentration to be tested, seal and carbonate each bottle to 4 Volumes.
- 2) Dilute the Line Lubricant to the suppliers intended concentrated percentage and froth up in a container.
- 3) Pour the frothed up Line Lubricant into and shallow vessel deep enough to immerse the complete base of the carbonated bottle.
- 4) Dip the base of each of the carbonated bottles into the Line Lubricant concentrates and ensure that the complete base bottle is immersed.
- 5) In the event that the Line Lubricant is used 100% neat, pour the lubricant into a shallow vessel and immerse the complete carbonated bottle base.
- 6) Place all the test bottles in a horizontal position in the walk in-oven at a controlled temperature of 38 degrees centigrade.
- 7) Allow the bottles to remain in the oven and periodically inspect the bases for Stress Cracking or deterioration.
- 8) The recommended inspection periods are 24 hours, 2 days, 7 days and 14 days.
- 9) The Line Lubricant is generally considered acceptable if after 7 days the carbonated bottles show no evidence of Stress Cracking or deterioration.

Issue No...002... Date...01/05/03/..... Authorisation.....i.Rawlings.....