

CERTIFICATE OF ANALYSIS

| PRODUCT : DILTIAZEM HO | | |
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| BATCH NO. : DIL/M-10515 | QUANTITY | |
| MFG. DATE : MAY.2015 | EXP. DATE | |
| QC A.R. No.: FP/134/2015 | | |
| TESTS | RESULTS | SPECIFICATIONS |
| 01. CHARACTERS i. Appearance | White, crystalline powder. | White or almost white, crystalline powder. |
| ii. Solubility | Freely soluble in water, in methanol and in methylene chloride, slightly soluble in anhydrous ethanol. | |
| iii. Melting point | Melts at 213°C with decomposition. | Melts at about 213° C with decomposition. |
| 02. IDENTIFICATION IR Absorption | Campandant with warding | ID Absorbing and the |
| IN Absorption | Concordant with working standard | IR Absorption spectrum of the sample concordant with that of the Diltiazem hydrochloride CRS / working standard. |
| CHLORIDES | Positive | It gives reaction to chlorides. |
| 03. APPEARANCE OF SOLUTION | Clear and colorless | Clear and colourless. |
| 04. pH | 4.9 | 4.3 to 5.3 |
| 05. SPECIFIC OPTICAL ROTATION | +118° | + 115° to + 120° |
| 06. RELATED SUBSTANCES (By HPLC) | | |
| Impurity F | Not Quantified | Not more than 0.3% w/w |
| Unspecified Impurities | Not Quantified | Not more than 0.10% w/w each |
| Total Impurities | Not Quantified | Not more than 0.30% w/w |
| 07. HEAVY METALS | Less than 10 ppm | Not more than 10 ppm |
| 08. LOSS ON DRYING | 0.22% | Not more than 0.50% w/w |
| 09. SULPHATED ASH | 0.02% | Not more than 0.10% w/w |
| 10. ASSAY (By Titration) (On dried basis) ADDITIONAL TESTS: 1. RESIDUAL SOLVENTS: | 100.16% | Not less than 98.50% w/w and Not more than 101.00% w/w |
| Toluene | 182 ppm | Not more than 750 ppm |
| Methanol | 211 ppm | Not more than 500 ppm |
| Isopropyi Alcohol | 5 ppm | Not more than 1000 ppm |
| Ethyl Acetate | 0 ppm | Not more than 2500 ppm |
| REMARKS: The product conforms to Ph.Eur8.0 Specifications | | |

Prepared by Executive-QC Checked by Manager-QC

Approved by General Manager-QC

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