Add: Sanzao Science & Technology Park, National Hi-Tech Zone, Zhuhai, Guangdong – 519040, P. R. China
Tel: +86-756-7766777 Fax: +86-756-7767377

聯邦制藥（珠海）
UNITED LABORATORIES (ZHUHAI)

# ZHUHAI UNITED LABORATORIES CO., LTD.

CONTAINER N°: INBU5448255/40' GP

## CERTIFICATE OF ANALYSIS

D12071110881 NO:220806001

| | | | |
|---|---|---|---|
| Name of product | Amoxicillin Trihydrate Compacted | Batch NO. | 30912078044 |
| Packing | 25.00kg/drum | Pieces | 40 drums +1drum |
| Batch Weight | 1024.64kg | Specifications | EP and Enterprise standard |
| Mfg. Date | 15/07/2012 | Exp.Date | 06/2015 |
| Date of testing | 15/07/2012 | Date of report | 06/08/2012 |
| Storage | Store in the airtight container | | |
| CEP: No.R0-CEP2007-191-Rev 02 | | | |

| TESTS | SPECIFICATIONS | RESULTS | CONCLUSION |
|---|---|---|---|
| 〔APPEARANCE〕 | A white or almost white crystalline powder and granule. | A white crystalline powder and granule. | Conforms |
| 〔IDENTIFICATION〕 | Examine by IR absorption spectrophotometry. comparing with the spectrum obtained with amoxicillin trihydrate CRS | Conforms | Conforms |
| [SOLUBILITY] | It slightly soluble in water, very slightly soluble in ethanol (96 percent), practically insoluble in fatty oils. It dissolves in dilute acids and dilute solutions of alkali hydroxides. | Conforms | Conforms |
| 〔TESTS〕 | | | |
| Appearance of solution | Not more opalescent than reference suspension Ⅱ (0.5M hydrochloric acid) | ＜reference suspension Ⅰ | Conforms |
| | Not more opalescent than reference suspension Ⅱ (dilute ammonia R2) | ＜reference suspension Ⅰ | |
| pH | 3.5 to 5.5 | 4.6 | Conforms |
| Specific optical rotation | + 290 to + 315 | +300 | Conforms |
| Related substances | | | Conforms |
| Any specified impurity | ≤1.0% | 0.32% | |
| Any unspecified impurity | ≤ 0.10% | 0.05% | |
| Total impurities | ≤ 3.0% | 0.79% | |
| N, N-Dimethylaniline | NMT 20 ppm (Not used in process) | Conforms | Conforms |
| Water | 11.5% to 14.5% | 12.8% | Conforms |
| Sulphated ash | NMT1.0% | 0.060% | Conforms |
| Assay | 95.0%~102.0% $C_{16}H_{19}N_3O_5S$ (Calculated on anhydrous basis) | 99.3% | Conforms |
| Residual solvents | | | Conforms |
| a) Acetone | NMT800ppm | 66 ppm | |
| b) Dichloromethane | NMT600ppm | 350ppm | |
| c) Triethylamine | NMT300ppm | 57 ppm | |
| d) N,N-dimethylacetamide | NMT1090ppm | 281 ppm | |
| e) Toluene | NMT600ppm | 325 ppm | |
| f) Pivalic acid | NMT1000ppm | 677 ppm | |
| Bulk Density | 0.45 g/ml to 0.65g/ml | 0.54 g/ml | Conforms |
| Tapped Density | NLT0.65g/ml | 0.77 g/ml | Conforms |
| Particle size | NMT15%(≥850μm) | 4% | Conforms |
| | NLT55%(850μm～180μm) | 76% | |
| | NMT30%(≤180μm) | 20% | |

**CONCLUSION: The results conform with EP and Enterprise standard**

Pharmacopoeia quality: Complies with the current editions of USP, EP & BP
Manufactured according to ICH Q7A GMP for APIs

REPORTED BY: 冯英 CHECKED BY: 秦青 APPROVED BY: