

XI'AN JUNYUAN BIO-TECH CO.,LTD

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Certificate of Analysis--- Cholic acid

| Product Name | Cholic acid | Batch No | DS10401 |
|--------------|---------------|---------------|---------------------|
| Quantity | 300KGS | Analysis Date | Dec.1th, 2020 |
| Mfg. Date | Dec.1th, 2020 | Exp. Date | Dec.1th, 2022 |
| Package | 25KG/Drum | Standard | Enterprise Standard |

| TEST | SPECIFICATION | RESULT | | |
|---------------------|---|--------------------------------|--|--|
| Appearance | White to off-white crystals | White crystals | | |
| Identification | 1-HNMR: Consistent with the standard | Conforms | | |
| | IR: The IR absorption spectrum of the sample must be concordant | Conforms | | |
| | with test Standard. | | | |
| | HPLC: The HPLC spectrum of the sample must be concordant with | st be concordant with Conforms | | |
| | the standard substance. | Comonis | | |
| Residue on ignition | NMT 0.2% | 0.02% | | |
| Water | NMT 2.0% | 0.06% | | |
| Heavy Metals | NMT 20ppm | 5ppm | | |
| Related Substance | Impurity A: NMT 0.2% | 0.07% | | |
| | Impurity B: NMT 0.15% | 0.03% | | |
| | Impurity C: NMT 0.15% | 0.07% | | |
| | Any other impurity: NMT 0.10% | N.D. | | |
| | Total impurities: NMT 1.0% | 0.17% | | |
| Residual Solvents | Methanol: NMT 0.3% | N.D. | | |
| | Ethanol: NMT 0.5% | N.D. | | |
| | Ethyl acetate: NMT 0.5% | N.D. | | |
| Assay(By HPLC) | 98.0%~102% | 99.84% | | |
| Storage | Store in a tightly closed container in a cool and dry place, below 20℃. | | | |
| Conclusion | Confirm to enterprise standard | | | |
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QC: MANAGER:NianChen INSPECTOR:FeiDeng ANALYST: XiLi