Shilpa Pharma Lifesciences Limited

Unit-2: Plot No: 33, 33A & 40-47, Raichur Industrial Growth Center, Chicksugur-584 134, Raichur District, Karnataka State, India.

CIN No. U24100KA2020PLC134081

CERTIFICATE OF ANALYSIS

Name of the Material : URSODEOXYCHOLIC ACID

Batch No. : UDA2210004 Drug license No. : KTK/25/564/2009

 Mfg. Date
 NOV-2021
 Batch Quantity
 235.900 Kg

 Retest Date
 OCT-2022
 A.R.No.
 40000062017

S.No.	Tests	Results	Specifications
1.	Appearance < In-House>	White powder	A White or almost white powder.
2.,	Solubility <in-house></in-house>	Complies	Practically insoluble in water, Freely soluble in ethanol (96%), Slightly soluble in acetone, Practically insoluble in methylene chloride.
3.	Identification a) By FT-IR < Ph. Eur>	Complies	The infrared absorption spectrum of sample should exihibit maxima only at the same wavelengths as that similar preparation of standard.
	b) By Thin layer chromatography < <i>Ph.Eur</i> >	Complies	Examine the chromatogram obtained in the test solution for Impurity-C.
	c) By Chemical test < Ph. Eur >	Complies	The suspension obtained is greenish blue.
4.	Loss on drying at 105±2°C for 2 hours <ph.eur 2.2.32=""></ph.eur>	0.29%	Not more than 1.0% w/w
5.	Melting point <ph.eur></ph.eur>	200.8 to 202.3°C	About 202°C
6.	Sulphated ash < Ph. Eur>	0.04%	Not more than 0.1%
7.	Specific optical rotation (2% in anhydrous ethanol at 20°C on dried basis) < Ph.Eur 2.2.7>	+59.2°	Between +58.0° to +62.0°
8.	Related substances (By HPLC) < Ph. Eur 2.2.29>		
	■ Impurity-A	0.65%	Not more than 1.0% w/w
	Any unspecified impurity	0.05%	Not more than 0.10% w/w
	Total impurities	0.70%	Not more than 1.5% w/w
9.	Impurity-C content (By TLC) < Ph.Eur 2.2.27>	Less than 0.1%	Not more than 0.1% w/w
10.	Assay by Titrimetry (On dried basis) < Ph. Eur 2.2.20>	100.1%	Between 99.0% to 101.0%
11,	Residual solvents by GC-HS <in-house></in-house>		
	Methanol	Below LOQ	Not more than 3000 ppm (LOQ: 90.720 ppm)
	■ Acetone	Not Detected	Not more than 5000 ppm
	Methylene dichloride	Not Detected	Not more than 600 ppm

	Prepared by	Checked by	Approved by
Name	B.Arvind	B.S.Petarge	K.Rajababu
Designation	Sr.Executive-QC	Sr.Manager-QC	Manager-QA
Sign & Date	@ 23 po 122	28 ean	23/07/22

Shilpa Pharma Lifesciences Limited

Unit-2: Plot No: 33, 33A & 40-47, Raichur Industrial Growth Center, Chicksugur-584 134, Raichur District, Karnataka State, India.

CIN No. U24100KA2020PLC134081

CERTIFICATE OF ANALYSIS

Name of the Material : URSODEOXYCHOLIC ACID

Batch No. UDA2210004 Drug license No. KTK/25/564/2009

 Mfg. Date
 NOV-2021
 Batch Quantity
 235.900 Kg

 Retest Date
 OCT-2022
 A.R.No.
 40000062017

S.No.	Tests	Results	Specifications
	2-Butanol	Not Detected	Not more than 5000 ppm
	Ethyl acetate	600 ppm	Not more than 5000 ppm
	■ MIBK	Not Detected	Not more than 4500 ppm
	Triethylamine	263 ppm	Not more than 1000 ppm
12.	Microbial limit tests < Ph. Eur>		
	Microbial enumeration tests		
	a) Total Aerobic Microbial Count	Less than 10 cfu/g	Not more than 1000 cfu/g
	b) Total combined Yeast and	Less than 10 cfu/g	Not more than 100 cfu/g
	Mould Counts		1
	II) Test for specified microorganisms		
	a) Escherichia coli	Absent	Should be absent
Storag	ge condition: Preserve in tight closed contained	er and store at controlled roo	om temperature (20°C to 25°C).

Storage condition: Preserve in fight closed container, and store at controlled room temperature (20°C to 25°C)

Remarks: The material complies with the above respective specifications.

Chemical name of impurities:

Impurity-A	1	3α, 7α-dihydroxy-5β-Cholan-24-oic acid (Chenodeoxycholic acid)
		or
		(4R)-4-((3R,5S,7R,10S,13R,17R)-3,7-dihydroxy-10,13-dimethylhexadecahydro-1H-cyclopenta [α]phenanthren-
		17-yl) pentanoic acid
Impurity-C	:	3α, hydroxyl-5β-Cholan-24-oic acid (Lithocholic acid)

	Prepared by	Checked by	Approved by
Name	B.Arvind	B.S.Petarge	K.Rajababu
Designation	Sr.Executive-QC	Sr.Manager-QC	Manager-QA
Sign & Date	@-2310122	- 13ean	1849