



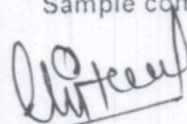
CERTIFICATE OF ANALYSIS

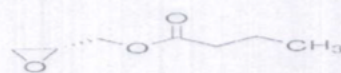
Customer Name	: Macleods Pharmaceuticals	Product	: (S)-Glycidyl Butyrate
Batch No.	: API/FG-11/20-21/001	CAS No.	: 65031-96-1
Batch Size/Sample Size	: 289.00 Kg	MDL No.	: MFCD00273369
Mfg. Date	: 08 th Oct. 2020	HSN Code	: 29339900
Expiry Date	: 07 th Oct. 2021	Molecular Formula	: C ₇ H ₁₂ O ₃
Lot Size	: 1 x 289.00 Kg	Molecular Weight	: 144.17 g / mol
Lot No.	: AE/API/224	Lot Date	: 08 th Oct. 2020
PO No./Ref.	: 08POKX3520	PO/Ref. Date	: 28 th Aug. 2020

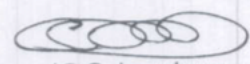
Sr. No.	Method/Test	Standard	Analysis	Remarks
1	Description	Clear to yellow color liquid	Clear colorless liquid	Passed
2	Identification			
	A) By IR	The infrared absorption spectrum of the sample should be concordant with the infrared absorption spectrum of S-(+)-Glycidyl Butyrate standard/reference sample.	-do-	Passed
	B) By HPLC	The retention time of the principal peak obtained in sample solution should correspond to that obtained in the System suitability solution in the test for Enantiomeric purity.		
3	Density (g/ml) @ 25°C	0.95 to 1.10	1.04	Passed
4	Related Substances (By GC) %			
	a)Epichlorohydrin	Not more than 0.5%	0.24%	Passed
	b)Glycidol	Not more than 1.00%	0.20%	
	c)n-Butyric Acid	Not more than 0.5%	Nil	
	d) (R)-3-Chloro-1,2-Propanediol	Not more than 1.00%	Nil	
	e)Any unknown individual impurity	Not more than 2.00%	0.29%	
	f)Total Impurities	Not more than 3.00%	1.58%	
5	Assay (By GC) %	Not less than 96.00%	98.42%	Passed
6	Enantiomeric Purity % (R-Isomer)	Not more than 1.00%	0.27%	Passed
7	Water (K.F)%	Not more than 1.0% (w/w)	0.11%	Passed

* Storage Temperature = Store in dry and well ventilated place below 25°C

* Sample complies as per customer specification


(QC-Chemist)




(QC-In charge)