

## Esomeprazole Magnesium USP42

Batch no

22101501

Mf date

Oct 15 2022

Retest

Oct 14 2025

Molecular Structure

Molecular Formula  $C_{34}H_{36}MgN_6O_6S_2$  ·

Molecular Weight

767.17

CAS Registry Number

217087-09-7

Aug 06 2024

<u>Tests</u>	<u>Specifications</u>		Results
Appearance	White to slightly colored powder		Conforms
Solubility	Dissolved in methanol, slightly soluble in water, almost insoluble in heptane		Conforms
Identification	IR		Positive
Appearance of solution	At 440 nm, Absorbance ≤ 0.2		0. 08
Water	6.0 ~ 8.0%		6. 45%
Related substances	Omeprazole N-oxide	≤ 0.1%	0. 03%
	Omeprazole sulfonamide compounds	≤ 0.2%	0. 1%
	Other unknown monohetero	≤ 0.1%	0.06%
	Total impurities	≤ 0.5%	0. 24%
Enantiomeric purity	Enantiomeric ≤ 0.2%		0.09%
Magnesium content	3. 3 ~ 3. 55%		3. 48%
Residual solvents	Methanol ≤ 3000 ppm		166 ppm
	Isopropyl alcohol ≤ 5000 ppm		ND
	Acetone ≤ 5000 ppm		325 ppm
	Ethyl acetate ≤ 5000 ppm		ND
	Toluene ≤ 890 ppm		55 ppm
Assay (oab)	98.0 ~ 102.0%		99. 23%
Packaging & storage	Preserve in tight containers, pro Store at room temperature	otected	from light.
Conclusion	Material complies with USP42	*	