Clindamycin Hydrochloride
PRODUCT DATA SHEET

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Product Name:	Clindamycin Hydrochloride
Product Number:	C035
CAS Number:	21462-39-5
Molecular Formula:	$C_{18}H_{33}ClN_2O_5S \cdot HCl$
Molecular Weight:	461.44 g/mol
Form:	Powder
Appearance:	White or almost white crystalline powder
Solubility:	soluble in aqueous solution
Source:	Semi-synthetic
Water Content (Karl Fischer):	3.0-6.0%
Potency (on a dry basis):	≥800 µg/mg ($C_{18}H_{33}ClN_2O_5S$)
pH:	3.0-5.5
Storage Conditions:	2-8 °C. Store in airtight container.
Description:	Clindamycin Hydrochloride is a broad-spectrum antibiotic and antiparasitic agent. It is a semi-synthetic derivative of Lincomycin, a natural lincosamide isolated from *Streptomyces lincolnensis* in 1966. Clindamycin Hydrochloride is freely soluble in water. We also offer: • Clindamycin (C233) • Clindamycin Phosphate (C036)
Mechanism of Action:	Lincosamides inhibit bacterial protein synthesis by binding the 50S ribosomal subunit and interfering with tRNA activity during translation.
Spectrum:	Clindamycin is a broad-spectrum antibiotic targeting primarily Gram-positive and Gram-negative bacteria such as *Clostridium* and *Bacteroides* species.
Microbiology Applications	Clindamycin is commonly used in clinical *in vitro*microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against gram positive and gram negative anaerobes. Medical microbiologists use AST results to recommend antibiotic treatment options. Representative ranges include: • *Clostridium difficile* 0.25 µg/mL - 32 µg/mL • *Bacteroides fragilis* 0.25 µg/mL - 4 µg/mL For a complete list of Clindamycin MIC values, click here.

References:

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