Clavulanic Acid Potassium w/ Cellulose (1:1)
PRODUCT DATA SHEET

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Product Name:	Clavulanic Acid Potassium w/ Cellulose (1:1)
Product Number:	C065
CAS Number:	61177-45-5
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Form:	Powder
Appearance:	White or almost white powder
Source:	Mixture
Water Content (Karl Fischer):	≤2.5%
Absorbance:	≤0.4 at 278nm
pH:	4.8-8.0
Description:	Clavulanate Acid Potassium w/ Cellulose (1:1) is a stable salt preparation of Clavulanic Acid, a natural, low-molecular weight β-lactam antibiotic. It has weak, broad-spectrum activity but offers synergistic antibacterial activity with penicillins and cephalosporins for greater efficacy against β -lactam resistant strains. We also offer: • Clavulanate Lithium (C064) • Clavulanic Acid Potassium (C232)
Mechanism of Action:	Clavulanate is a potent suicide inhibitor of β -lactamases. It forms a covalent bond with a serine residue in the enzyme's active site. Inhibition is time-dependent and irreversible. Clavulanic acid β-lactam antibiotics bind and inhibit PBPs (penicillin binding protein) thus inhibiting bacterial cell wall synthesis.
Microbiology Applications	Clavulanic acid had poor activity against *S.aureus*, Enterobacteriaceae, and *P. aeruginosa*. However, it can act synergistically with penicillins and cephalosporins to inhibit β -lactamase-producing *S. aureus* and Enterobacteriaceae.

References:

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