Carfilzomib
PRODUCT DATA SHEET

issue date 01/06/2020

Product Name:	Carfilzomib
Product Number:	C149
CAS Number:	868540-17-4
Molecular Formula:	$C_{40}H_{57}N_5O_7$
Molecular Weight:	719.91 g/mol
Appearance:	White solid
Storage Conditions:	2-8°C
Description:	Carfilzomib is an anti-cancer tetrapeptide epoxyketone drug and is used for the treatment of multiple myeloma.
Mechanism of Action:	Carfilzomib prevents tumor growth by inhibiting 20S proteasome activity which leads to an accumulation of polyubiquinated proteins, and ultimately, cell cycle arrest or apoptosis.
References:	Pautasso, Chiara, Sara Bringhen, Chiara Cerrato, Valeria Magarotto, and Antonio Palumbo. "The Mechanism of Action, Pharmacokinetics, and Clinical Efficacy of Carfilzomib for the Treatment of Multiple Myeloma." Expert Opinion on Drug Metabolism & Toxicology 9.10 (2013): 1371-379. Kortuem, K. M., and A. K. Stewart. "Carfilzomib." *Blood* 121.6 (2013): 893-97.