

Insulin

Indication	Diabetic Ketoacidosis Control of Blood Glucose concentrations
Dose	Diabetic Ketoacidosis Refer to unit protocol. Usual infusion rate 0.1-0.2units per kg per hour. Control of Blood Glucose See prescription chart for regimen
Preparation	Insulin Actrapid® contains 100units/ml 1. Draw up 0.5ml (50units) of insulin using a 50unit insulin syringe 2. Transfer to a 60ml syringe using a green needle 3. Dilute to 50ml with sodium chloride 0.9%
Administration	Give via a peripheral or central line
Shelf-life	24 hours at room temperature for the SYRINGE that is made 4 weeks at room temperature for the VIAL used for production.
Common Compatibility Issues	Insulin is considered compatible with midazolam and propofol at concentrations normally used on ICU. Insulin should not be run with noradrenaline due to risk of precipitation.
Additional information	Pre-made insulin syringes are manufactured by Pharmacy. This monograph is for use only until further supplies can be obtained. Insulin Vials should be patient specific and have a 4-week expiry. When a vial is opened stick a patient sticker on the box and document date of opening. The opened vial should be stored in the patient's bedside locker Due to absorption to giving sets it may take 8-24hours for BM's to stabilise on a given regimen after set changes. Close monitoring of blood glucose is required for patients While treating DKA/HONK falls in blood glucose 15mmol/L or below are treated by adding a glucose 10% or 20% infusion instead of reducing the insulin infusion rate. Ensure Patients Long-Acting Insulin (e.g., Lantus etc.) is continued

Sample Label	DRUGS ADDED TO THIS INFUSION			
	PATIENT <i>A. Patient (A. Number)</i>			WARD <i>ICU</i>
	DRUG <i>Insulin in 50ml sodium chloride 0.9%</i>	AMOUNT <i>50 units (1unit/ml)</i>	ADD BY	CHECKED BY
	DATE ADDED TIME ADDED	EXP. DATE EXP. TIME	BATCH No.	
	DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS			

For review March 2026

Documentation Controls

Development of Guideline:	Pharmacist – Critical Care & Theatres
Consultation with:	Pharmacy Department
Approved By:	ICU Sister's Meeting: June 2023 ICU Risk & Quality Meeting: August 2023 Pharmacy approval Dec 2023
Review Date:	March 2026
Key contact:	Pharmacist – Critical Care & Theatres

References

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*** End of Monograph ***