

# Hydroxycobalamin Intravenous Infusion for Adults

## Who can administer

May be administered by registered competent doctor or nurse/midwife

## Important information

- Antidote for Cyanide poisoning - please consult TOXBASE or NPIC for further information

## Available preparations

Cyanokit® 5g vial

## Reconstitution

- Using the sterile transfer device enclosed, reconstitute with 200mL Sodium Chloride 0.9% (to the red line marked on the vial)
- The vial should be rocked or inverted for at least 1 minute to mix the solution, but it must not be shaken (as shaking the vial may cause foaming)
- Use enclosed infusion set for administration (includes an appropriate filter). This is because the reconstituted solution is dark red and some insoluble particles may not be seen

## Infusion fluids

Sodium Chloride 0.9% preferred (and also see Further Information)

## Methods of intravenous administration

**First 5g dose:** Slow intravenous infusion over 15 minutes

**Second 5g dose (if used):** Slow intravenous infusion over 15 minutes to 2 hours (duration dictated by severity of patient's symptoms)

## Dose in adults

### Cyanide poisoning

- Initial dose: 5g
- Subsequent dose: Depending upon the severity of the poisoning and the clinical response, a second dose of 5g may be administered.

### Renal impairment

- No dose adjustment required

### Hepatic impairment

- No dose adjustment required

## Monitoring

- Renal function should be monitored until 7 days after treatment
- Monitor blood pressure (risk of hypertension)

## Further information

- As hydroxocobalamin is red and water soluble, transient red discolouration of skin and mucous membranes can be expected for up to 15 days; urine may be discoloured for up to 35 days <sup>(ref 1)</sup>. The discolouration may interfere with some biochemical analyses - caution is required when interpreting laboratory results for up to 48 hours after administration. It may also interfere with all urine colorimetric parameters. See [SPC](#) for further information
- Because of its deep red colour, hydroxocobalamin may cause haemodialysis machines to shut down (due to an erroneous detection of a 'blood leak') until it is eliminated from the blood (at least 5.5 to 6.5 days <sup>(ref 2)</sup>)
- Limited stock held at UHG (total of two 5g vials) - please contact Pharmacy immediately if further stock needed
- Glucose 5% may be used for reconstitution only if Sodium Chloride 0.9% is unavailable or unsuitable

## Storage

Store below 25°C

## References

UK SPC April 2018 (checked May 2025- no update to SPC)

1. TOXBASE accessed 07/05/2025
2. Package insert accessed online EMEA website 08/05/2025

## Therapeutic classification

Emergency treatment of poisoning