

# HYDROXOCOBALAMIN

<b>CLASSIFICATION</b>	Antidote
<b>TRADE NAME(S)</b>	Cyanokit
<b>DESIRED EFFECTS</b>	Speeds breakdown and degradation of cyanide, a potent cellular toxin.
<b>MECHANISM OF ACTION</b>	The action of Cyanokit in the treatment of cyanide poisoning is based on its ability to bind cyanide ions. Each hydroxocobalamin can bind one cyanide ion by substituting it for the hydroxo ligand to the trivalent cobalt ion to form cyanocobalamin, which is excreted in the urine
<b>INDICATIONS</b>	<ul style="list-style-type: none"> <li>Known or highly suspected significant cyanide ingestion or poisoning</li> </ul>
<b>CONTRAINDICATIONS</b>	<ul style="list-style-type: none"> <li>None</li> </ul>
<b>ADVERSE REACTIONS</b>	<ul style="list-style-type: none"> <li>Anaphylaxis</li> <li>Chest tightness</li> <li>Edema</li> <li>Urticaria</li> <li>Pruritus</li> <li>Dyspnea</li> <li>Rash</li> <li>Hypertension</li> </ul>
<b>DRUG INTERACTIONS</b>	<ul style="list-style-type: none"> <li>Physical incompatibility (particle formation) was observed with the mixture of cyanokit in solution and the following drugs: diazepam, dobutamine, dopamine, fentanyl, nitroglycerin, pentobarbital, propofol, and thiopental. Consequently, these drugs should not be administered simultaneously through the same IV line as cyanokit.</li> <li>Chemical incompatibility was observed with sodium thiosulfate, sodium nitrate, and has been reported with ascorbic acid. Consequently, these drugs should not be administered simultaneously through the same IV line as cyanokit</li> </ul>
<b>PRECAUTIONS</b>	<ul style="list-style-type: none"> <li>Smoke inhalation: Use nitrites cautiously in patients with cyanide poisoning related to smoke inhalation because methemoglobinemia and carboxyhemoglobinemia may worsen oxygen-carrying capacity.</li> </ul>
<b>DOSING REGIMEN</b>	<ul style="list-style-type: none"> <li><b>Adult – 70 mg/kg (Usually ~5 g) IV infusion over 15 minutes.</b></li> </ul> <p>Depending on the severity of the poisoning and the clinical response, a second dose of 5 g may be administered by IV infusion for a total dose of 10 g</p> <hr/> <ul style="list-style-type: none"> <li><b>Pediatric –</b> <ul style="list-style-type: none"> <li><b>70mg/kg IV infusion over 15 minutes</b></li> </ul> </li> </ul> <p>Depending on the severity of the poisoning and the clinical response, a second dose of 70 mg/kg may be administered by IV infusion</p>
<b>PROTOCOL LOCATION</b>	<a href="#">Toxic Exposure - Cyanide Exposure</a>

