

# Drug Compatibility in Subcutaneous Infusions Chart in Standard Forms

|                       | Cyclizine | Dexamethasone | Fentanyl | Glycopyrrolate | Haloperidol | Hydromorphone | Hyoscine Butylbromide | Hyoscine Hydrobromide | Ketamine   | Ketorolac | Levomopromazine | Metoclopramide | Methadone | Midazolam  | Morphine Sulphate | Octreotide | Ondansetron | Oxycodone  | Phenobarbitone. Sodium |   |
|-----------------------|-----------|---------------|----------|----------------|-------------|---------------|-----------------------|-----------------------|------------|-----------|-----------------|----------------|-----------|------------|-------------------|------------|-------------|------------|------------------------|---|
| Cyclizine             | pH 3-3.7  | ⚠             | ?        | ✔              | ✔           | ✔             | ⚠                     | ✔                     | ?          | ?         | ✔               | ?              | ?         |            | ⚠                 | ✔          | ✔           | ✔          | ?                      |   |
| Dexamethasone         | ⚠         | pH 7-8.5      | ?        | ?              | ⚠           | ⚠             | ✔                     | ✔                     | ✔          |           | ⊘               |                | ✔         | ⊘          | ⚠                 |            | ⚠           | ✔          | ⊘                      |   |
| Fentanyl              | ⚠         | ?             | pH 4-7.5 | ✔              | ✔           | ✔             | ✔                     | ✔                     | ✔          |           | ?               | ✔              | ?         | ✔          | ?                 | ✔          | ✔           | ?          | ✔                      |   |
| Glycopyrrolate        | ✔         | ?             | ✔        | pH 2.3-4.3     | ✔           | ✔             | ✔                     | NA                    | ✔          |           | ✔               | ✔              | ✔         | ✔          | ✔                 | ?          | ✔           | ✔          | ⊘                      |   |
| Haloperidol           | ✔         | ⊘             | ✔        | ✔              | pH 2.8-3.6  | ⚠             | ✔                     | ✔                     | ✔          | ⊘         | ✔               | ✔              | ✔         | ✔          | ✔                 | ✔          | ✔           | ✔          | ?                      |   |
| Hydromorphone         | ⚠         | ⚠             | ✔        | ✔              | ⚠           | pH 4-5.5      | ✔                     | ✔                     | ✔          | ⚠         | ✔               | ✔              | ?         | ✔          | NA                | ✔          | ✔           | NA         | ?                      |   |
| Hyoscine Butylbromide | ⚠         | ?             | ✔        | ?              | ?           | ?             | pH 3-5.5              | ?                     | ✔          | ?         | ✔               | ✔              | ✔         | ✔          | ✔                 | ✔          | ✔           | ✔          | ?                      |   |
| Hyoscine Hydrobromide | ✔         | ✔             | ✔        | NA             | ?           | ✔             | ?                     | pH 4                  | ✔          |           | ✔               | ✔              | ✔         | ✔          | ✔                 | ✔          | ✔           | ✔          | ?                      |   |
| Ketamine              | ?         | ✔             | ✔        | ✔              | ✔           | ✔             | ✔                     | ✔                     | pH 3.5-5.5 |           | ✔               | ✔              | ✔         | ✔          | ✔                 | ✔          | ?           | ?          | ✔                      | ? |
| Ketorolac             |           |               |          |                | ⊘           | ⚠             |                       |                       |            | pH 7-8    |                 |                | ✔         | ?          | ✔                 | ?          | ?           |            | ?                      |   |
| Levomopromazine       | ✔         | ⚠             | ?        | ✔              | ✔           | ✔             | ✔                     | ✔                     | ✔          | ?         | pH 3-5          | ✔              | ✔         | ✔          | ✔                 | ✔          | ✔           | ✔          | ?                      |   |
| Metoclopramide        | ✔         | ✔             | ✔        | ✔              | ✔           | ✔             | ✔                     | ✔                     | ✔          |           | ?               | pH 3-6.5       | ✔         | ✔          | ✔                 | ✔          | ✔           | ✔          | ?                      |   |
| Methadone             | ?         | ✔             | ?        | ✔              | ✔           | ?             | ?                     | ✔                     | ?          |           | ✔               | ✔              | pH 4.5-7  | ✔          | ?                 | ?          | ?           | ✔          | ⊘                      |   |
| Midazolam             | ?         | ⊘             | ✔        | ✔              | ✔           | ✔             | ✔                     | ✔                     | ✔          |           | ✔               | ✔              | ✔         | pH 2.9-3.7 | ⚠                 | ✔          | ✔           | ✔          | ?                      |   |
| Morphine Sulphate     | ✔         | ✔             | ?        | ✔              | ✔           | NA            | ✔                     | ✔                     | ✔          | ✔         | ✔               | ✔              | ?         | ✔          | pH 2.5-6          | ✔          | ✔           | NA         | ?                      |   |
| Octreotide            | ⚠         | ⚠             | ✔        | ✔              | ✔           | ✔             | ✔                     | ✔                     | ✔          | ⚠         | ⚠               | ✔              | ?         | ✔          | ✔                 | pH 3.5     | ✔           | ✔          | ?                      |   |
| Ondansetron           | ⚠         | ⚠             | ✔        | ✔              | ✔           | ✔             | ✔                     | ✔                     | ✔          |           | ✔               | ✔              | ?         | ✔          | ✔                 | ✔          | pH 3.9-4.5  | ✔          | ?                      |   |
| Oxycodone             | ⚠         | ✔             | ?        | ✔              | ✔           | NA            | ✔                     | ✔                     | ✔          | ?         | ✔               | ✔              | ?         | ✔          | NA                |            | ✔           | pH 4.5-5.5 | ?                      |   |
| Phenobarbitone Sodium | ?         | ?             | ?        | ⊘              | ?           | ?             | ?                     | ?                     | ?          | ?         | ?               | ?              | ⊘         | ?          | ?                 | ?          | ?           | ?          | pH 8.5-10.5            |   |

**KEY** Incompatible Compatible Sometimes incompatible (usually at higher concentrations) - observe carefully Unknown NA not usually used together

**Please note:**

- This table should be used as a general guide only as high concentrations of drug combinations will affect the compatibility of the desired infusion. Vigilance is required in all cases.
- pH may vary with different formulations; check product information or consult the manufacturer.
- Where there is no symbol indicating medication compatibility OR unknown symbol, it is not recommended for use, or proceed with caution and closely monitor administration site.**

References:

- Dickman A, Schneider J, Varga J. The syringe driver: continuous subcutaneous infusion in palliative care 3<sup>rd</sup> Ed. Oxford: Oxford University Press; 2011
- Palliative Care Therapeutic Guidelines. Version 3, 2010 Syringe Driver Compatibility Table.
- The Palliative Care Handbook: Guidelines for clinical management and symptom control 2014 pages 150-151
- Syringe Driver - Drug Compatibility database. Palliative Care Matters. <http://www.pallcare.info>
- Gardiner PR. Compatibility of an injectable oxycodone formulation with typical diluents, syringes, tubings, infusion bags and drugs for potential co-administration. Hosp Pharm Sept 2003;10:354-361
- Trissel's 2 Clinical Pharmaceutic Database (Parenteral Compatibility). [2007] Micromedex [On-Line] <http://micromedex.hcn.net.au>