

Caffeine Citrate Solution 20 mg/mL

INGREDIENTS:

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| Caffeine citrate powder | 9.6 g |
| Sterile water for irrigation | QSAD: 480 mL |

EQUIPMENT AND SUPPLIES:

Powder containment hood, pharmaceutical analytical scale, graduated cylinder

PREPARATION DETAILS:

1. Weigh out powder and add to graduated cylinder.
2. Dissolve powder in graduated cylinder to the volume of sterile water for irrigation indicated above.
3. Transfer the solution into an appropriately sized amber bottle.
4. Shake well to mix.

Quality-Control Procedures — Visually inspect for physical appearance of formulation and container closure integrity (no leakage, cracks in container, or improper seals).

Labeling Requirements — Extemporaneously compounded preparation. For oral use only. Store at room temperature or refrigerate. Shake well before use.

Storage Conditions/Stability — Store at room temperature or refrigerate. Stable for 342 days.

STABILITY STUDY DETAILS:

Study Container Type — Clear, sterile, pyrogen-free glass vial

Referenced Manufacturers — Caffeine citrate powder (Sel-Win Scientific, Ltd); sterile water (Abbott Laboratories).

Stability-Indicating Study — Yes

Commercially available — Use extemporaneously prepared formulation only when commercial product is unavailable.

Footnote — Caffeine citrate 20 mg/mL = caffeine base 10 mg/mL.

REFERENCE

1. Donnelly RF, Tirona RG. Stability of citrated caffeine injectable solution in glass vials. *Am J Hosp Pharm.* 1994;51(4):512-514.