ITEM# Z14-305-FC25

INVESTING CASTING



KEY NOTES

- a. One kit includes two 40 oz. bottles of concentrated binder and 25-lbs of powder.
- b. It is normal for the material and flask to become hot after the investment has set.
- c. After mixing process has started, the working time is 6-7 minutes. After the working time, the material will become very hard.
- d. If the slurry (powder & liquid) hardens in less than 5 minutes, then the liquid must be refrigerated before mixing with the powder

FLASK & MIXING INSTRUCTIONS

- 1. Wax solder your wax mushroom shaped sprue (74-000-WC) to the center of your Non-asbestos paper base (76-0881-4RND).
 - 2. Sprue your parts to a round wax sprue base (74-000-WC). Flair the ends of the sprue to the connected part with 45 degree angles.
- 3. Line the inside of your flask with the non-asbestos paper (76-0885), allowing a ¼-1/2" of space on the top and bottom of the flask. The non-asbestos paper touch should line the inside of the flask completely.
- 4. Center your 3x3" solid flask over the non-asbestos square and solder wax around the outside bottom edge of the flask to make a water tight seal.
- 5. Approximately, 600 grams of powder is enough investment for one 3 x 3" flasks. (454 grams = 1 pound)
- 6. Our suggested ratio for making a working liquid solution is 70% binder concentrate and 30% distilled water by volume.
- Always cap off your bottle of working solution and shake thoroughly prior to using.
- 7. The correct ratio for one 3 x 3" flask is, 150 ml of pre-mixed working solution to 600 grams of powder.
- 8. We recommend a mechanical mixer with a stainless steel bowl. Add the working solution first and then the powder. Mixing by hand is not suggested, it will be difficult to mix the material uniformly.
- 9. Mix at a slow speed for 15-20 seconds until all the powder has been mixed thoroughly.
- 10. Then mix at high speed for 3 minutes, until the material is uniform in texture and has a "creamy" appearance.
- 11. It's best to vacuum the mixing bowl first for 1 minute. If your mixing bowl will not fit under your bell jar, pour your slurry into a smaller rubber bowl and vacuum.
- 12. Then pour the vacuumed investment slurry up to the flask rim and then vacuum a second time for 30 seconds.
- 13. The flask should bench sit for at least one hour, prior to loading into the oven.
- 14. Prior to loading your flask, remove the non-asbestos paper base.

this much powder	requires this much distilled water (30%)	and this + much binder (70%)	binder working solution
1 lb. (454g)	34 mL	79 mL	113 mL
5 lbs. (2270g)	170 mL	395 mL	565 mL
10 lbs. (4540g)	340 mL	790 mL	1130 mL
25 lbs. (11350g)	850 mL	1975 mL	2825 mL

BURN-OUT INSTRUCTIONS



- 1. Preheat oven to 300°F.
- 2. Load flasks and hold for 1-hour at 300°F.
- 3. Ramp up to 575°F over 1-hour.
- 4. Hold flasks at 575°F for 2-hours.
- Ramp up to 1600°F (Platinum) over 1 hour. (1350°F = Gold)
- Hold for 1-hour at 1600°F(Platinum) and cast. (1350°F = Gold)
- Reduce flask temp. for Gold down to 1000°F to cast.



DE-VESTING INSTRUCTIONS

- 1. Quench the flask after the button is no longer red in color.
- 2. Take a hammer and tap the round sprue base from the bottom of the flask.
- 3. You can use a water investment blaster and/or a Romanoff Jelrus Sandblaster, (48000-R-2).

Romanoff International Supply Corporation

