



(cf: Mayo; Pike; Trumper, 436 – 437)

chemical	benzil	1,3-diphenylacetone	triethylene glycol
source	Aldrich, 98%	Aldrich, 98%	Akros, reagent
purification	UAR*	UAR	UAR
MW	210.23	210.27	
d(g/ml)	N/A (solid)		
amount	0.401 g	0.406 g	2 ml
mmol	1.91	1.93	
eq.	1.00	1.01	

- benzil, diphenylacetone and triethylene glycol added to 5 ml conical vial (equipped w/air-condenser + spin vane)
- heated until sol'n homogeneous (sand bath ~150 °C, ~10 min)
- added 0.4 ml benzyltrimethylammonium hydroxide sol'n (40% in MeOH, 0.96 mmol, 0.5 eq)
- as sol'n cooled, deep purple/brown x-tals began to precipitate
- poured rxn into 15 ml Erlenmeyer, rinsed residue in w/~5 ml *cold* MeOH (reagent)
spilled some of sol'n, lost some x-tals
- cooled flask in ice bath (~10 min)
- isolated w/Hirsch funnel, rinsed 3 x w/small minimum cold MeOH
- pure x-tals are clean, dark purple
- sample (YDG-4-075A) left to dry until next lab

1/25/05

yield: 0.60 g (1.56 mmol, 82 %)

mp: 217–219 (lit: 220–221)

IR – KBr pellet

(list and assign prominent peaks)

NMR – ¹H, CDCl₃

(list and assign all peaks)

* UAR = used as received