

## To Ø1 - Dangerously Close To Stupid (clone) - 9.3%

### Double IPA

Author: Kasper Skytte Andersen

Type: All Grain

IBU : 81 (Tinseth)  
 BU/GU : 0.97  
 Colour : 12 EBC  
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.059  
 Original Gravity : 1.084  
 Final Gravity : 1.013

### Fermentables (2.01 kg)

1.866 kg - Pilsner 4 EBC (92.7%)  
 99 g - Sugar, Table (Sucrose) 2 EBC (4.9%)  
 ^ Add at flame out or during hopstand/whirlpool  
 47 g - Melanoidin 59 EBC (2.3%)

### Hops (111.6 g)

60 min - 9.4 g - Chinook - 13% (51 IBU)  
 5 min - 9.9 g - Centennial - 10% (13 IBU)

### Hop Stand

20 min hopstand @ 80 °C  
 20 min 80 °C - 19.8 g - Citra - 12% (13 IBU)  
 20 min 80 °C - 9.9 g - Amarillo Gold - 8.5% (...)

### Dry Hops

2 days - 24.7 g - Citra - 12%  
 2 days - 24.7 g - Simcoe - 13%  
 2 days - 6.6 g - Amarillo Gold - 8.5%  
 2 days - 6.6 g - Centennial - 10%

### Miscellaneous

Mash - 0.07 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 1.93 g - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.06 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 1.87 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 3.01 g - Gypsum (CaSO4)  
 ^ The Malt Miller (UK) CHE-03-004  
 Mash - 0.4 ml - Lactic Acid 80% 80%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3  
 5 min - Boil - 0.329 items - Protafloc  
 ^ There are plenty of other options out there...

### Yeast

0.9 pkg - Fermentis Safale American US-05

### Ø1 Brouwpunt 5L (60min) (rev 4)

Batch Size : 5.6 L  
 Boil Size : 7.76 L  
 Post-Boil Vol : 5.96 L

Mash Water : 5.74 L  
 Sparge Water : 3.98 L  
 Boil Time : 60 min  
 Total Water : 9.72 L

50% diluted with 4.86 L Reverse Osmosis Water

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

High fermentability  
 56.3 °C - Strike Temp  
 52 °C - 5 min - Mash in (small protein rest)  
 66 °C - 45 min - Beta amylase

### Fermentation Profile

Ale  
 22 °C - 5 days - Primary fermentation  
 2 °C (1 day ramp) - 2 days - Dry hop + cold c...  
 2 °C - 7 days - Transfer (+ Filter) + Mature

### Water Profile

Ø2 NL Spa Reine Flat Mineral Water (www.ah.nl...  
 Ca 99 Mg 20 Na 10 Cl 50 SO 250

SO/Cl ratio: 5

Mash pH: 5.39

Sparge pH: 6

### Measurements

Mash pH:

Boil Volume:

Pre-Boil Gravity:

Post-Boil Kettle Volume:

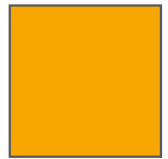
Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity:

Bottling Volume:



12 EBC

# To Ø1 - Dangerously Close To Stupid...

## Recipe Notes

### To Ø1 notes:

It would be dangerously close to stupid not to brew another batch of Dangerously Close To Stupid. This beast was the first DIPa that To Ø1 ever did, and after it blazed a trail of chaos all over the world for years, and is a To Ø1 favorite for many, us included!

This expression is our take on the West Coast DIPa heavily focused on Citra and Centennial.

### My personal notes:

The original recipe lists Cascade instead of Centennial, but in the description they mention Centennial.

One or the other is a mistake, who knows which, I use Centennial here because of the higher AA.

Malt bill: Compared to the original recipe I've added a bit more sugar to push the ABV to 9.3%. It's a matter of equipment and efficiency.

Hops: I also added a bit more of the 60 min boil Chinook to hit (estimated) 75 IBU.

Dry hop: Dry hop during cold crash to reduce chance of hop creep and to maximize hop utilization.

Water profile: Matter of taste, but a bitter west coast IPA needs to be crisp and dry, so I would up the sulphate to chloride ratio with up to 200-250 ppm sulphate and keep chloride below 50ppm or so.