

## ZD Clone

---

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **60**
- SRM **6.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	4 kg (81.6%)	81 %	4
Grain	Strzegom Wiedeński	0.4 kg (8.2%)	79 %	10
Grain	Weyermann - Carapils	0.15 kg (3.1%)	78 %	4
Grain	Cara Gold Castlemalting	0.2 kg (4.1%)	78 %	120
Grain	Weyermann - Melanoiden Malt	0.15 kg (3.1%)	81 %	53

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Citra	20 g	80 min	12 %
Boil	Citra	20 g	15 min	12 %
Boil	Citra	20 g	10 min	12 %
Boil	Citra	20 g	5 min	12 %
Whirlpool	Citra	20 g	20 min	12 %
Dry Hop	Citra	50 g	5 day(s)	12 %

### Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
FM52 Amerykański Sen	Ale	Slant	150 ml	Fermentum Mobile