

Drugi brzeg

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **88**
- SRM **4.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **17.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **62 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **70 min** at **62C**
- Keep mash **5 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **17.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.2 kg (82.1%)	81 %	4
Grain	Weyermann - Carapils	0.4 kg (10.3%)	78 %	4
Grain	Carahell	0.2 kg (5.1%)	77 %	26
Grain	Weyermann - Acidulated Malt	0.1 kg (2.6%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	8 g	60 min	12.8 %
Boil	Columbus/Tomahawk/Zeus	8 g	60 min	16.8 %
Boil	Chinook	8 g	30 min	12.8 %
Boil	Columbus/Tomahawk/Zeus	8 g	30 min	16.8 %
Boil	Chinook	10 g	15 min	12.8 %
Boil	Columbus/Tomahawk/Zeus	10 g	15 min	16.8 %
Aroma (end of boil)	Chinook	24 g	0 min	12.8 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	24 g	0 min	16.8 %
Whirlpool	Centennial	10 g	15 min	10.5 %
Whirlpool	Citra	10 g	15 min	12 %

Whirlpool	Simcoe	10 g	15 min	13.2 %
Dry Hop	Centennial	40 g	4 day(s)	10.5 %
Dry Hop	Citra	40 g	4 day(s)	12.8 %
Dry Hop	Simcoe	40 g	4 day(s)	13.2 %

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	2 g	Boil	15 min
Water Agent	Gips	2 g	Mash	70 min