

Buszujący w zbożu

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **3.5**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **23.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (50%)	81 %	4
Grain	Pszeniczny	2.2 kg (50%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	12 g	50 min	13 %
Boil	Amarillo	15 g	15 min	8.9 %
Boil	Citra	10 g	5 min	13.5 %
Boil	Amarillo	15 g	0 min	8.9 %
Boil	Citra	10 g	0 min	13.5 %
Dry Hop	Amarillo	20 g	3 day(s)	8.9 %
Dry Hop	Citra	30 g	3 day(s)	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11.5 g	Mangrove Jack's