

Amerykańskie żyto

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **40**
- SRM **4.8**
- Style **American Wheat or Rye Beer**

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 **80 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **17.6 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (45.5%)	80 %	5
Grain	Żytni	2.5 kg (45.5%)	85 %	8
Grain	Płatki owsiane	0.5 kg (9.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Boil	Sybilla	10 g	60 min	3.5 %
Boil	Citra	10 g	15 min	12 %
Aroma (end of boil)	Citra	10 g	0 min	12 %
Whirlpool	Citra	20 g	0 min	12 %
Dry Hop	Citra	50 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile