

HA!-meryka

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **16**
- SRM **3.5**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.7 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **9.1 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	1.2 kg (46%)	81 %	4
Grain	Słód pszeniczny Bestmalz	1.2 kg (46%)	82 %	5
Grain	Płatki owsiane	0.2 kg (7.7%)	85 %	3
Adjunct	Skórka cytryny	0.01 kg (0.4%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	40 min	12 %
Boil	Amarillo	10 g	15 min	6.3 %
Aroma (end of boil)	Citra	30 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar BRY-97	Ale	Dry	10 g	danstar