

## Jack beer (warka nr 92)

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **56**
- SRM **6.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss --- %
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	3 kg (60%)	85 %	10
Grain	Strzegom Monachijski typ I	2 kg (40%)	85 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	14.7 %
Boil	Columbus/Tomahawk/Zeus	20 g	30 min	14.7 %
Boil	Columbus/Tomahawk/Zeus	10 g	10 min	15.5 %
Dry Hop	Citra	30 g	4 day(s)	12.5 %
Dry Hop	Chinook	30 g	4 day(s)	11.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Belgian Fruit Spicy Ale Yeast	Ale	Dry	10 g	Gozdawa

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min