

# Jałowcowe

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **14**
- SRM **12.7**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **73 C**, Time **20 min**
- Temp **80 C**, Time **1 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **73C**
- Keep mash **1 min** at **80C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Karmel 150	0.4 kg (8.7%)	75 %	150
Grain	Viking Pale Ale malt	4 kg (87%)	80 %	5
Grain	Strzegom Czekoladowy jasny	0.2 kg (4.3%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	40 min	6.5 %
Boil	Tradition	10 g	5 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	Jałowiec	20 g	Boil	10 min