

## leśna dzida 23

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **39**
- SRM **6.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **39.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **80 C**, Time **0 min**

### Mash step by step

- Heat up **30 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **80C**
- Sparge using **28.1 liter(s)** of **76C** water or to achieve **48.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (20%)	79 %	9
Grain	Viking Pale Ale malt	3 kg (30%)	80 %	5
Grain	Monachijski Ciemny viking malt	3 kg (30%)	100 %	22
Grain	Pilzneński	2 kg (20%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	22.2 g	25 min	11 %
Boil	Hallertau Blanc	72.6 g	20 min	9.3 %
Boil	Saaz pl	50 g	15 min	5.5 %
Whirlpool	saaz pl	50 g	0 min	5.5 %
Whirlpool	inuga	36.7 g	0 min	12.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	15 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	pędy sosny (świerze)	600 g	Boil	30 min