

## #28 Bitter Willow

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **44**
- SRM **10.8**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3 liter(s)**
- Total mash volume **4 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	Bruntal ekstrakt słodowy jasny	3.4 kg (77.3%)	81 %	26
Grain	Viking Pale Ale malt	0.5 kg (11.4%)	80 %	5
Grain	Weyermann - Carawheat	0.25 kg (5.7%)	77 %	120
Grain	Carahell	0.15 kg (3.4%)	77 %	30
Grain	Słód owsiany Fawcett	0.1 kg (2.3%)	61 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Wolf	20 g	60 min	14.9 %
Boil	Saaz (Czech Republic)	30 g	30 min	3.7 %
Aroma (end of boil)	Nadwiślański	20 g	5 min	5.9 %
Aroma (end of boil)	Saaz (Czech Republic)	20 g	5 min	3.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Slant	200 ml	Fermentum Mobile

### Notes

- Warzenie ~9l, reszta uzupełniona wodą w fermentorze.  
*Feb 3, 2022, 8:08 PM*