

Gorzkie żale

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **93**
- SRM **7.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **31.9 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (46.1%)	80 %	5
Grain	Pszoniczny	0.5 kg (6.6%)	85 %	4
Grain	Strzegom Pilzneński	3.5 kg (46.1%)	80 %	4
Grain	Strzegom Karmel 600	0.1 kg (1.3%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	50 g	60 min	12.6 %
Boil	Mosaic	50 g	25 min	12 %
Boil	Apollo	50 g	5 min	17 %
Dry Hop	Amarillo	50 g	7 day(s)	8.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale us-05	Ale	Dry	11.5 g	---