

## APA Gorszego Sortu (nr 9)

- Gravity **12.5 BLG**
- ABV ---
- IBU **35**
- SRM **7.3**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.1 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.4 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3 kg (63.8%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (21.3%)	79 %	10
Grain	Pszeniczny	0.5 kg (10.6%)	85 %	4
Grain	Caramunich Malt	0.2 kg (4.3%)	71.7 %	110

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8 %
Boil	Cascade	20 g	5 min	6 %
Boil	Chinook	20 g	5 min	13 %
Whirlpool	Chinook	30 g	0 min	13 %
Dry Hop	Chinook	20 g	4 day(s)	13 %
Dry Hop	Centennial	40 g	4 day(s)	12 %

### Yeasts

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