

## No. 9

- Gravity **13.4 BLG**
- ABV ---
- IBU **33**
- SRM **7.8**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **33.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **68 C**, Time **75 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **14.9 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **75 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **24.5 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (84%)	85 %	4
Grain	Golden Promise Pale Ale	0.5 kg (8.4%)	85 %	6
Grain	Caramalt	0.25 kg (4.2%)	75 %	29
Grain	Crystal Wheat	0.1 kg (1.7%)	70 %	90
Grain	Fawcett - Crystal 160	0.1 kg (1.7%)	70 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	5 g	60 min	4 %
Boil	Sybilla	15 g	60 min	3.5 %
Boil	Aramis	20 g	30 min	7 %
Boil	Equinox	15 g	30 min	13.1 %
Whirlpool	Equinox	35 g	0 min	13.1 %
Whirlpool	Aramis	30 g	0 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Gozdawa Pure Ale Yeast 7	Ale	Dry	11.5 g	Safale
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