- 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**

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg <i>(84%)</i>	85 %	4
Grain	Golden Promise Pale Ale	0.5 kg <i>(8.4%)</i>	85 %	6
Grain	Caramalt	0.25 kg <i>(4.2%)</i>	75 %	29
Grain	Crystal Wheat	0.1 kg <i>(1.7%)</i>	70 %	90
Grain	Fawcett - Crystal 160	0.1 kg <i>(1.7%)</i>	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 Typ	e Form	Amount	Laboratory
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Gozdawa Pure Ale Ale Yeast 7	e	Dry	11.5 g	Safale
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