

alt

- Gravity **11 BLG**
- ABV ---
- IBU **32**
- SRM **13.8**

Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **53.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.4 liter(s)**
- Total mash volume **33.9 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **50 min**

Mash step by step

- Heat up **25.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **50 min** at **72C**
- Sparge using **36.2 liter(s)** of **76C** water or to achieve **53.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	7.6 kg (89.6%)	79 %	16
Grain	Karmelowy Czerwony	0.8 kg (9.4%)	75 %	59
Grain	Carafa	0.08 kg (0.9%)	70 %	664

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Spalt Select	160 g	60 min	3.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM50 Kłosy Kansas	Ale	Slant	100 ml	---