#### mm#1

- Gravity 8.5 BLG
- ABV 3.3 %
- IBU 6
- SRM **3.1**
- Style Specialty Beer

#### **Batch size**

- Expected quantity of finished beer 30 liter(s)
- Trub loss 5 %
- Size with trub loss 31.5 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 38 liter(s)

#### **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 15 liter(s)
- Total mash volume 20 liter(s)

# **Steps**

- Temp **55 C**, Time **10 min** Temp **67 C**, Time **45 min**
- Temp 76 C, Time 5 min

# Mash step by step

- Heat up 15 liter(s) of strike water to 60.8C
- Add grains
- Keep mash 10 min at 55C
- Keep mash 45 min at 67C
- Keep mash 5 min at 76C
- Sparge using 28 liter(s) of 76C water or to achieve 38 liter(s) of wort

# **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg <i>(40%)</i>	81 %	4
Grain	Weyermann pszeniczny jasny	2 kg (40%)	80 %	6
Grain	Viking Pale Ale malt	1 kg (20%)	80 %	5

# Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Chinook	20 g	7 day(s)	13 %
Aroma (end of boil)	Bramling	20 g	20 min	6 %

### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale BE-134	Ale	Dry	11.5 g	Fermentis
WLP677 - Lactobacillus Bacteria	Ale	Liquid	125 ml	White Labs

#### **Extras**

Туре	Name	Amount	Use for	Time
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Flavor	porzeczki	2000 g	Secondary	7 day(s)
Flavor	sosna	2000 g	Boil	20 min