# **Mandziak**

- Gravity 12.9 BLG
- ABV 5.2 %
- IBU **19**
- SRM **4.5**

### **Batch size**

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 %
- Size with trub loss 23 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 27.5 liter(s)

# **Mash information**

- Mash efficiency 70 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 20.7 liter(s)
- Total mash volume 26.6 liter(s)

### Steps

- Temp 68 C, Time 60 min
  Temp 76 C, Time 10 min

## Mash step by step

- Heat up 20.7 liter(s) of strike water to 74.8C
- Add grains
- Keep mash 60 min at 68C
- Keep mash 10 min at 76C
- Sparge using 12.7 liter(s) of 76C water or to achieve 27.5 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Wheat Malt	2.5 kg <i>(42.4%)</i>	85 %	5
Grain	Weyermann - Pilsner Malt	1.8 kg <i>(30.5%)</i>	81 %	5
Grain	Weyermann - Pale Ale Malt	1 kg (16.9%)	85 %	7
Grain	Płatki owsiane	0.4 kg (6.8%)	60 %	3
Grain	Weyermann - Carapils	0.2 kg (3.4%)	78 %	4

# Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Aroma (end of boil)	Cascade	15 g	15 min	6 %
Aroma (end of boil)	Cascade	15 g	7 min	6 %

### **Yeasts**

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

## **Extras**

Туре	Name	Amount	Use for	Time
Other	pulpa mango alphonso	5.1 g	Secondary	14 day(s)