#### **Tak**

- Gravity 14.7 BLG
- ABV **6.1** %
- IBU **55**
- SRM **10**

#### **Batch size**

- Expected quantity of finished beer 10 liter(s)
- Trub loss 5 %
- Size with trub loss 10.5 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 12.7 liter(s)

#### **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 10.5 liter(s)
- Total mash volume 13.5 liter(s)

### Steps

- Temp 52 C, Time 10 min
  Temp 66 C, Time 40 min
  Temp 72 C, Time 28 min

## Mash step by step

- Heat up 10.5 liter(s) of strike water to 56.6C
- Add grains
- Keep mash 10 min at 52C
- Keep mash 40 min at 66C
- Keep mash 28 min at 72C
- Sparge using 5.2 liter(s) of 76C water or to achieve 12.7 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	ЕВС
Grain	Strzegom Pale Ale	2.75 kg <i>(91.7%)</i>	79 %	6
Grain	Karmelowy żytni Strzegom	0.25 kg <i>(8.3%)</i>	75 %	150

# Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	12.5 g	60 min	10 %
Aroma (end of boil)	Sybilla	12.5 g	30 min	3.5 %
Aroma (end of boil)	Pekko	6 g	30 min	13.6 %
Boil	Lublin (Lubelski)	12.5 g	10 min	4 %
Boil	Pekko	7 g	10 min	13.6 %

## **Yeasts**

Name	Туре	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	

#### **Extras**

Type	Name	Amount	Use for	Time
. , , , ,	· · · · · · · · · · · · · · · · · · ·	Amount	050 101	

11 1	T 0.	1.0		1
Herb	Twara Cytrynowa	l 10 a	l Mash	
11010	i wara cya yilowa	1 + 0 9	1-14511	1