

# Ja graf

- Gravity **25.5 BLG**
- ABV **12 %**
- IBU **27**
- SRM **25.2**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **90 min**
- Evaporation rate **20 %/h**
- Boil size **15.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **7 liter(s)**
- Total mash volume **10.5 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **7 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	3 kg (24%)	79 %	16
Liquid Extract	sok jabłkowy	9 kg (72%)	14 %	16
Grain	Karmelowy Czerwony	0.25 kg (2%)	75 %	50
Grain	Aromatic Malt	0.25 kg (2%)	78 %	51

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	50 g	20 min	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	sok jabłkowy - zacieranie	4400 g	Mash	90 min

Other	sok jabłkowy - wysładzanie	4600 g	Mash	1 min
-------	-------------------------------	--------	------	-------