

# Podwójna koza dziadka Józka

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **40**
- SRM **19.2**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **120 liter(s)**
- Trub loss **5 %**
- Size with trub loss **126 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **158.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **114 liter(s)**
- Total mash volume **152 liter(s)**

## Steps

- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **25 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **114 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **82.7 liter(s)** of **76C** water or to achieve **158.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	16 kg (42.1%)	79 %	16
Grain	Strzegom Wiedeński	16 kg (42.1%)	79 %	10
Grain	Strzegom Karmel 150	5 kg (13.2%)	75 %	150
Grain	Strzegom Karmel 600	1 kg (2.6%)	68 %	601

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	100 g	60 min	4.1 %
Boil	Hallertau Spalt Select	100 g	60 min	3.4 %
Boil	Saaz (Czech Republic)	400 g	60 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Slant	2000 ml	---