

# Lager górnej fermentacji

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **29**
- SRM **3.7**

## Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **67 C**, Time **20 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **70.8C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **67C**
- Sparge using **26.5 liter(s)** of **76C** water or to achieve **36.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6.6 kg (90.4%)	80 %	4
Grain	Weyermann - Carapils	0.7 kg (9.6%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	40 g	50 min	4 %
Boil	Saaz (Czech Republic)	70 g	30 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us05	Ale	Dry	20 g	---

## Extras

Type	Name	Amount	Use for	Time
Fining	whirflock	1 g	Boil	10 min