

# TB\_PolskieJasne

- Gravity **11.1 BLG**
- ABV ---
- IBU **37**
- SRM **9.3**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.7 kg (92.5%)	81 %	4
Grain	Strzegom Karmel 150	0.3 kg (7.5%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %
Boil	Lublin (Lubelski)	20 g	10 min	4 %
Boil	Marynka	15 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M10 Workhorse	Ale	Dry	11 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	4 g	Boil	15 min