

# PILS 12BLG dla Taty

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- Gravity **11.2 BLG**
- ABV ---
- IBU **44**
- SRM **4.7**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name        | Amount       | Yield | EBC |
|-------|-------------|--------------|-------|-----|
| Grain | Pilzneński  | 4.4 kg (88%) | 81 %  | 4   |
| Grain | Monachijski | 0.6 kg (12%) | 80 %  | 16  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 15 g   | 60 min | 10 %       |
| Boil                | Marynka           | 25 g   | 30 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 38 g   | 20 min | 4 %        |

## Yeasts

| Name                               | Type  | Form | Amount | Laboratory      |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Dry  | 10 g   | Mangrove Jack's |