

# German PilsDar

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **29**
- SRM **3.8**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **3 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **3 %/h**
- Boil size **30.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **24.7 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód pilzneński	5.5 kg (84.6%)	81 %	4
Grain	Castlemalting - Cara Clair	0.5 kg (7.7%)	78 %	4
Grain	wiedeński	0.5 kg (7.7%)	81 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	30 g	60 min	6.5 %
Boil	Marynka	10 g	60 min	8.8 %
Boil	Hersbrucker	25 g	20 min	4 %
Aroma (end of boil)	Hallertau Mittelfruh	20 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safale w-34/70	Lager	Dry	23 g	Fermentum Mobile