

# Ale Be+De

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **30**
- SRM **7.4**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **16 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.3 liter(s)**
- Total mash volume **13.3 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **10.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **16 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (84.6%)	81 %	4
Grain	carared	0.2 kg (6.8%)	50 %	---
Grain	Abbey Castle	0.055 kg (1.9%)	80 %	45
Grain	Caramel/Crystal Malt - 120L	0.2 kg (6.8%)	72 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10.4 g	60 min	11.5 %
Boil	Hallertau Mittelfruh	20 g	15 min	4.1 %
Boil	Hallertau Mittelfruh	10 g	5 min	4.1 %