

# Dark Ale

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- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **22**
- SRM **27.2**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **0 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6 kg (84.5%)	80 %	7
Grain	Carafa III	0.1 kg (1.4%)	70 %	1034
Grain	Special X	1 kg (14.1%)	70 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Golding	70 g	60 min	3.6 %
Dry Hop	Styrian Golding	30 g	7 day(s)	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Safale
Mangrove Jack's M47 Belgian Abbey	Ale	Dry	11.5 g	Mangrove Jack's

## Notes

- Zacieranie:
  1. 67 stopni - 1500W
  2. 72 stopnie - 1500W
  3. Mash-out - 2500W

W 72 stopniach dodajemy Carafa III.

Warka do podziału na 2 fermentory. Do dwóch idą drożdże us-05, do dwóch M47 - belgia.  
*Nov 3, 2017, 9:50 PM*