

# Dunkel A

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **11**
- SRM **7.9**
- Style **Munich Dunkel**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **23.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **77.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **23.3 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Briess - Pilsen Malt           | 4 kg (90.9%)   | 80 %  | 20  |
| Grain | Briess - Wheat Malt, White     | 2 kg (44.4%)   | 85 %  | 5   |
| Grain | Briess - Caracrysal Wheat Malt | 0.5 kg (11.1%) | 78 %  | 108 |

## Hops

| Use for | Name        | Amount | Time   | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil    | Hersbrucker | 30 g   | 60 min | 4.5 %      |

## Yeasts

| Name         | Type  | Form | Amount | Laboratory |
|--------------|-------|------|--------|------------|
| Safale US-05 | Lager | Dry  | 23 g   | Fermentis  |