

American Dubbel

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **50**
- SRM **16.8**
- Style **Belgian Dubbel**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.1 liter(s)**

Steps

- Temp **52 C**, Time **5 min**
- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.38 kg (61.4%)	80 %	5
Grain	Viking Wheat Malt	0.63 kg (8.8%)	83 %	5
Grain	Viking Munich Malt	0.63 kg (8.8%)	78 %	18
Grain	Słód Caramunich Typ II Weyermann	0.38 kg (5.3%)	73 %	120
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Grain	Strzegom Karmel 150	0.25 kg (3.5%)	75 %	150
Grain	Special B Malt	0.13 kg (1.8%)	65.2 %	315
orzech, śliwka ,rodzynki, karmel				
Grain	Strzegom Karmel 600	0.13 kg (1.8%)	68 %	601
Sugar	Candi Sugar, Clear	0.63 kg (8.8%)	78.3 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	80 min	10 %

Boil	Cascade	30 g	30 min	6 %
Boil	Styrian Golding	30 g	30 min	3.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	---