Doppelbock Heaven und Hell

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **22**
- SRM **18.4**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **29.7 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **23.1 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **3.4 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Münchner Malz Best	2.5 kg *(37.9%)*	78 %	20
Grain	Wiener Malz Best	2 kg *(30.3%)*	80 %	8
Grain	Pilsner Malz Best	1.5 kg *(22.7%)*	81 %	3
Grain	Chocolate Best	0.1 kg *(1.5%)*	75 %	900
Grain	Caramunich 2 Best	0.2 kg *(3%)*	73 %	120
Grain	Cara Amber	0.2 kg *(3%)*	75 %	70
Grain	BESTMALZ - Best Melanoidin	0.1 kg *(1.5%)*	75 %	71

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	25 g	60 min	7.3 %
Boil	Lublin (Lubelski)	10 g	15 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Wyeast 2206 - Bavarian Lager	Lager	Slant	600 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Fining	Bierosol	5 g	Boil	10 min