

mish

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **49**
- SRM **14.7**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **51 C**, Time **70 min**
- Temp **65 C**, Time **70 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **70 min** at **51C**
- Keep mash **70 min** at **65C**
- Keep mash **60 min** at **100C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (28.6%)	81 %	4
Grain	Strzegom Wiedeński	2 kg (28.6%)	79 %	10
Grain	Strzegom Karmel 150	1 kg (14.3%)	75 %	150
Grain	Strzegom Bursztynowy	1 kg (14.3%)	70 %	49
Grain	whisky	1 kg (14.3%)	--- %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	50 g	30 min	15 %
Dry Hop	Marynka	100 g	4 day(s)	8.8 %