Scotisch Export 80 Warka #4

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **20**
- SRM **9.2**
- Style **Scottish Export 80/-**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **12.7 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **69.3C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **60 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.4 kg *(82.2%)*	79 %	6
Grain	Karmelowy Jasny 30EBC	0.1 kg *(3.4%)*	75 %	30
Grain	Cookie Stregom	0.3 kg *(10.3%)*	75 %	40
Grain	Jęczmień palony	0.02 kg *(0.7%)*	55 %	1300
Grain	Rice, Flaked	0.1 kg *(3.4%)*	70 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	5 g	60 min	4.5 %
Boil	East Kent Goldings	5 g	60 min	5.1 %
Boil	Fuggles	10 g	20 min	4.5 %
Boil	East Kent Goldings	10 g	20 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 g	Safale

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