

czokolate muskowado staft #6

- Gravity **12.4 BLG**
- ABV ---
- IBU **22**
- SRM **40**

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 **17 %/h**
- Boil size **33.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **54 C**, Time **15 min**
- Temp **69 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **15 min** at **54C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **33.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ II | 1 kg (17.4%) | 79 % | 22 |
| Grain | Strzegom Pale Ale | 2 kg (34.8%) | 79 % | 6 |
| Grain | Żytni | 1 kg (17.4%) | 85 % | 8 |
| Grain | Weyermann - Dehusked Carafa III | 0.4 kg (7%) | 70 % | 1024 |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (7%) | 68 % | 1200 |
| Grain | Strzegom Karmel 300 | 0.5 kg (8.7%) | 70 % | 299 |
| Grain | Jęczmień palony | 0.15 kg (2.6%) | 55 % | 985 |
| Sugar | Brown Sugar, Dark | 0.3 kg (5.2%) | 100 % | 99 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil | Target | 10 g | 60 min | 10.5 % |
| Boil | Kent Goldings | 15 g | 15 min | 5.5 % |
| Boil | Kent Goldings | 15 g | 30 min | 5.5 % |

| | | | | |
|------|---------------|------|-------|-------|
| Boil | Kent Goldings | 20 g | 5 min | 5.5 % |
|------|---------------|------|-------|-------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------|------|--------|---------|-------------|
| Wyeast - Irish Ale | Ale | Liquid | 1000 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------|--------|---------|-------|
| Spice | Lukrecja | 15 g | Boil | 5 min |