

Multigrain Ale

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **40**
- SRM **4.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **9.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **60 min** at **72C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|-----------------|-------|-----|
| Grain | Kasze (gryka, jęczmien, pszenica) | 0.75 kg (21.7%) | 80 % | 10 |
| Grain | Słód diastatyczny | 2 kg (58%) | 80 % | 2 |
| Sugar | Brown Sugar, Light | 0.2 kg (5.8%) | 100 % | 16 |
| Grain | Oats, Flaked | 0.5 kg (14.5%) | 80 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 25 g | 5 min | 4.5 % |
| Dry Hop | zula | 200 g | 3 day(s) | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|------|-----|------|---------|
| Water Agent | gips | 4 g | Mash | 120 min |
|-------------|------|-----|------|---------|