

Wungiel

- Gravity **16.9 BLG**
- ABV ---
- IBU **27**
- SRM **40**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **80 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20.64 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **4 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **77C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **4 min** at **76C**
- Sparge using **-9.4 liter(s)** of **76C** water

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------------|---------|-------|------|
| Grain | Pale Ale | 3 kg | 81 % | 4 |
| Grain | Pilznieński | 1 kg | 85 % | 4 |
| Grain | Pszeniczny | 0.75 kg | 79 % | 4 |
| Adjunct | płatki owsiane błyskawiczne | 0.4 kg | 70 % | 3 |
| Grain | Barwiący | 0.35 kg | 55 % | 1500 |
| Grain | Czekoladowy | 0.5 kg | 60 % | 1200 |
| Grain | Jęczmień palony | 0.04 kg | 55 % | 1333 |
| Sugar | Laktoza | 0.7 kg | 99 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 7.5 % |
| Boil | Lublin (Lubelski) | 20 g | 20 min | 3.2 % |
| Boil | Tradition | 30 g | 60 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-------|--------|--------|
| Safale S-04 | Ale | Slant | 0.6 ml | Safale |
|-------------|-----|-------|--------|--------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Flavor | laktoza | 750 g | Boil | 15 min |