

JACK BROWN

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **50**
- SRM **22.2**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Pilzneński | 3 kg (55.6%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ II | 2 kg (37%) | 80 % | 22 |
| Grain | Jęczmień palony | 0.2 kg (3.7%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy 1200 | 0.1 kg (1.9%) | 68 % | 1202 |
| Grain | Strzegom Karmel 600 | 0.1 kg (1.9%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.7 % |
| Boil | Columbus/Tomahawk/Zeus | 20 g | 20 min | 15.7 % |
| Boil | Columbus/Tomahawk/Zeus | 10 g | 5 min | 15.7 % |
| Dry Hop | Citra | 60 g | 4 day(s) | 12 % |

Yeasts

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

| | | | | |
|--|-----|-----|------|---------|
| Gozdawa Belgian Fruit Spicy Ale Yeast | Ale | Dry | 10 g | Gozdawa |
|--|-----|-----|------|---------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 20 min |