

Canola Grain Storage Tips

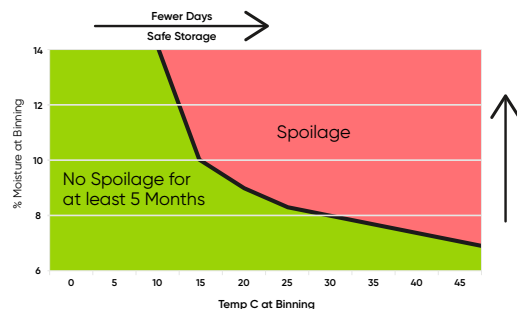
Key Points

- Safe storage in canola is all about maintaining stability. Lower moisture levels and lower temperatures will protect the value of your harvested crop.
- Even dry canola needs to be carefully monitored while in storage to prevent losses associated with spoilage from moisture migration and heating.
- To maintain the optimal quality of canola seed, it should be stored at 8% moisture. 10°C for long term storage canola is considered dry at 10% moisture.

Helpful storage tips to protect your canola

1. **Start with clean bins.** One of the best ways to prevent spoilage is to start with freshly cleaned bins free of potential contaminants. Harvest residue, dust and other debris often becomes hard packed under flooring, vents and other surface areas, restricting the airflow necessary for maintaining cooler temperatures. Additionally, this foreign material can host insects and diseases, which could potentially damage your canola during storage.
2. **Aeration.** Moisture migration within the bin and subsequent heating, especially high temperature fluctuations during the fall and winter, can cause serious problems. Aeration fans are fantastic for uniform circulation in the bin, helping prevent the development of hot spots and keeping your canola cool. Without proper aeration, augering grain between bins or turning over seed within the bin (by removing and replacing at least half the contents) can help prevent convection pockets.
3. **Respiration.** Canola typically will respire for 4 to 6 weeks pending bin temperature. Aeration should be kept on until the temperature inside the bin falls below 10°C.

4. **Dry seed carefully.** While canola intended for seeding should be dried at less than 45°C or lower, seed for oil extraction can be dried up to 82°C. If your canola is damp, a maximum drying temperature of 71°C is recommended. Monitor drying temperatures carefully to avoid "cooking canola".
5. **Monitoring.** To protect the quality of your canola seed, it needs to be optimally stored at 8% moisture and below 10°C. Pay close attention to temperature monitoring cables as even very minor temperature increases (+1-2°C) can signal the development of hot spots and potential spoilage. When in doubt, check the bin by paying close attention to the top middle section (where moisture and heat tend to migrate in winter). Avoid manual probing that can miss convection pockets. Consult the safe storage chart below to see if your stored canola is at risk.
6. **Use smaller bins if you have them.** Smaller bins just don't experience convection problems (heating) the way larger ones do. And when necessary, smaller bins make it easier to rotate the canola inside.
7. **Move lower grade canola sooner.** Foreign materials and lower quality canola are more prone to spoilage problems. When possible, move these first. Additionally, canola with higher green seed counts >5% has a higher risk of spoilage and needs to be binned separately.
8. **Be prepared to take action.** Drastic temperature increases in relatively short periods of time, like Prairie chinooks, can drastically affect bin temperatures. Careful monitoring and physical checks are recommended at these times. If temperatures within the bin increase dramatically, immediate cooling (either by aeration or rotating canola from different bins) is essential for minimizing the development of hot spots.



Canola storage risk increases with temperature, moisture and time