



Good Manufacturing Practices: Salting and Brining

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Dry Salt

- Dry salt does not support the growth of pathogenic bacteria
- It can be a source of chemical (eg copper, lead, mercury or cadmium) or physical contamination.
- It is easy to **sieve** the salt and **check it visually** for physical contaminants.
- If **glass or metal contamination** is suspected the salt should **not** be used.
- The salt should always be of **good quality**, and must be suitable for **food-use**. Obtain salt from a reputable supplier.
- Store it in a clean, dry area and away from sources of potential **contamination** (eg cleaning chemicals)



Maintenance of Brine Tanks

- Use water of **potable** quality to prepare brine and store it in a **clean** container.
- If the brine tank cannot be kept in the production or ripening areas it is possible to cover the tank with a **lid** if contamination is likely.
- The brine should be kept at a **temperature** appropriate to the technology.
- **Replenish salt** and **stir** after each use.
- **Suspended particles** should be removed regularly





Maintenance of Brine Tanks

- Complete or partial **renewal** of brine may be necessary depending on the **frequency of use** and **salt concentration**.
- **It is not recommended to pasteurise brine:**
 - Brine can **corrode HTST equipment** due to salt and acidity
 - Pasteurisation can **remove** organisms which might provide **positive compete** against pathogen growth



Salt Concentration and pH of Brine

- **Salt concentration** and **pH** should be appropriate to the technology and recipe employed.
- Where appropriate, a salt concentration $\geq 19.5^\circ$ Baumé (21% w/v) can limit the growth of even the most **salt-tolerant pathogens** (*Listeria* and Coagulase Positive Staphylococci)
- Brine pH may not be sufficient to control growth of pathogens but;

Some producers do monitor brine **pH** to ensure that it conforms **their expected values**.