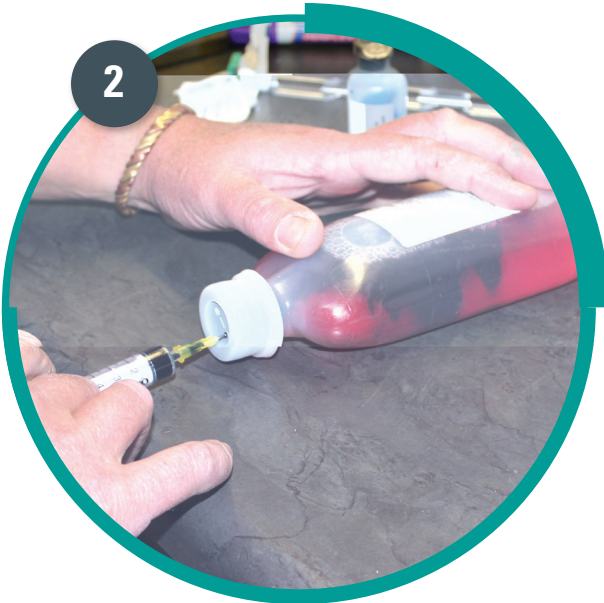


# PREPARATION OF AMPOULES

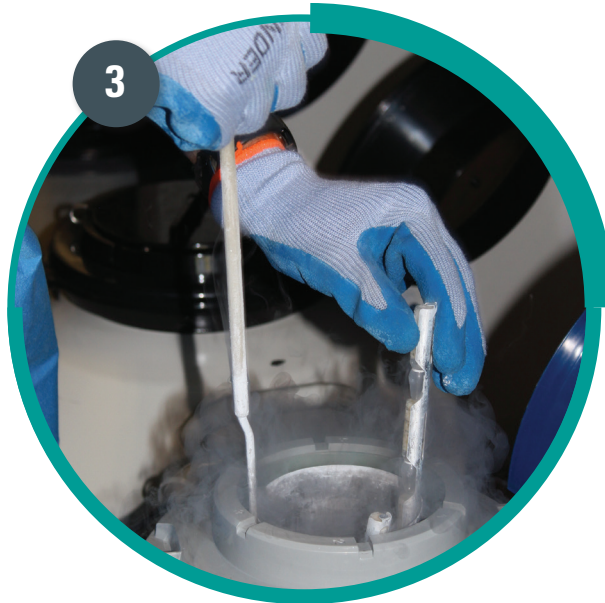
## OF CELL ASSOCIATED MSD ANIMAL HEALTH MAREK'S VACCINES



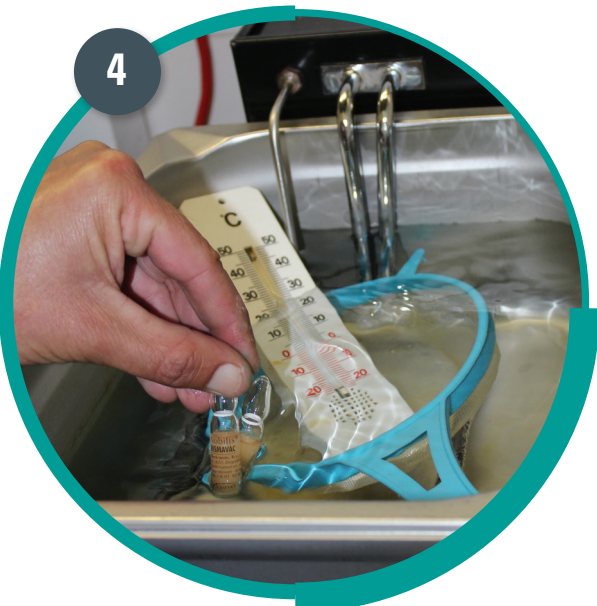
Protective gloves and a protective mask should be worn when handling liquid nitrogen.



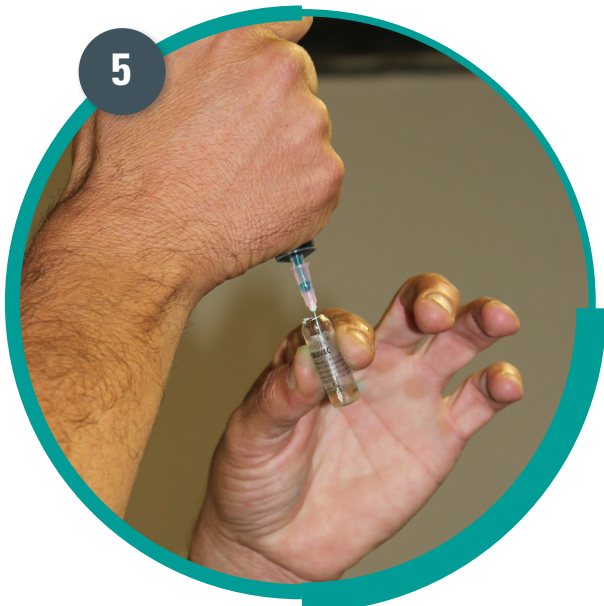
If a dye is used, it should be added to the diluent 5 minutes prior to the addition of the vaccine to allow the solution to stabilise. Take all the necessary measures to add the dye in a hygienic way.



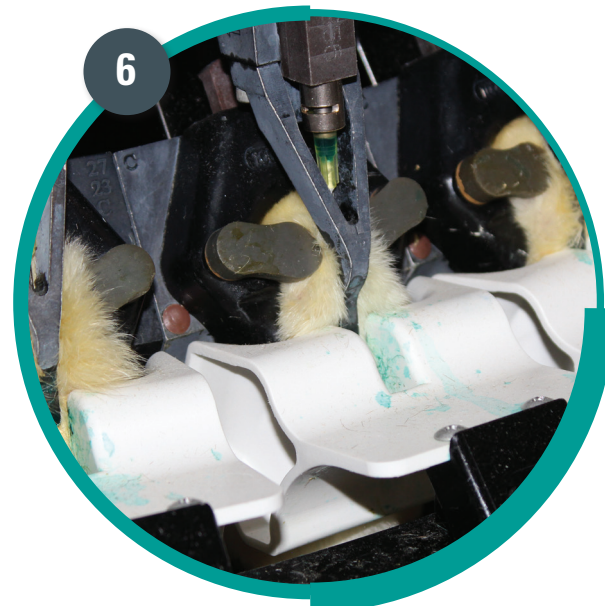
The canes holding the ampoules should be lifted out of liquid nitrogen, just high enough to permit the removal of one ampoule of vaccine at a time. Once taken from the cane, the ampoules should not be returned.



The ampoules of vaccine should be thawed in water at a temperature of 15 – 25 °C. This process should take no longer than 90 seconds as the titre level will drop thereafter.



Mix the vaccine with the diluent immediately after thawing, the diluent should have a temperature of 15 – 25 °C. Ensure that there is no vaccine in the neck of the ampoule before breaking it. Withdraw the vaccine from the ampoule using a sterile syringe fitted with an 18 gauge (1,0 mm) needle. Fill the syringe slowly and discharge it into the bottle of diluent slowly.



Vaccine should be administered subcutaneously in the neck or intramuscularly in the thigh. Only enough vaccine for 2 hours use should be prepared at a time.

## HANDLING AND ADMINISTRATION OF MSD ANIMAL HEALTH MAREK'S VACCINES

Proper handling and administration of Marek's Disease vaccines is absolutely essential, particularly for the cell-associated vaccines, which are very fragile. The following points may serve as guidelines for handling and administration.

GENERAL	DILUTION	GENERAL
<ul style="list-style-type: none"><li>One person should be responsible for storage and dilution of the vaccine.</li><li>The levels of liquid nitrogen should be checked daily and recorded in a logbook.</li><li>A second logbook should be kept listing serial numbers and expiry dates of vaccines and diluents.</li><li>Do not use any vaccine or diluent after the date of expiry.</li><li>Only use the diluent recommended by MSD Animal Health.</li><li>Preparation of the vaccines should take place in a clean room.</li><li>The ampoules of vaccine should be thawed in water at a temperature of 15 - 25 °C. This process should take no longer than 90 seconds as the titer level will drop thereafter.</li></ul>	<ul style="list-style-type: none"><li>Ampoules of cell-associated vaccine: withdraw the vaccine from the ampoule using a sterile syringe, fitted with an 18 gauge (1,0 mm) needle. Fill the syringe slowly and discharge it into the bottle of diluent slowly.</li><li>Flush each vaccine container 3 times with diluent and add the washings to the vaccine mixture.</li><li>Mix gently, but thoroughly, by swirling</li><li>Keep vaccine on ice after dilution.</li></ul>	<ul style="list-style-type: none"><li>The injecting device or hand vaccinator should be adjusted to deliver the required volume and checked periodically during use.</li><li>Shake vaccine before refilling injector device bottles, returning unused vaccine to the ice bath.</li><li>Vaccine should be administered subcutaneously in the neck or intramuscularly in the thigh.</li><li>A sterile needle should be used, size 0,9 x 25 mm (20 gauge x 1") for injecting machines or 0,9 x 10 mm (20 gauge x 3/8") for hand vaccinators.</li><li>Vaccinate at a rate that ensures that all chickens are vaccinated properly.</li><li>Only enough vaccine for 2 hours' use should be prepared at a time.</li><li>After completion of inoculations discard all unused vaccine and clean and sterilise the equipment.</li></ul>