

# Dry **ICE** 4 FARMING



4 Farming

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Dry Ice may be used in various industries for multiple purposes of which freeze-branding cattle and horses is another unique application thereof. Instead of heating branding irons when used in traditional methods, the branding irons are frozen using dry ice during a cold process. The cold branding iron destroys the underlying skin cells which produce hair pigmentation, so when the hair grows back it is of a bright white coloration.

Ear tags frequently get lost, the number fades or the tag becomes illegible, therefore freeze-branding remains a far better option for identification.

There are several advantages to freeze-branding:

1. Freeze brands are permanent identification marks for cattle and horses.
2. The branding is easy to see and identify from a distance.
3. Ideal for identification in the milking parlour and required for efficient data recording.
4. Essential for stock identification.
5. The animal is less traumatised and experiences less pain and stress, which is important for the animal's welfare.
6. The branding is clear, neat and tidy.
7. Freeze-branding causes little or no damage to the hide.



# How to Brand Cattle with Dry Ice

1



Pour Isopropyl Alcohol into a container with a 2.5 kg block of dry ice, add branding irons and allow to cool for 30 min.

2



Restrain the cattle in a headgate, if the chute cannot squeeze to a comfortable restraint you will need an immobiliser.

3



Brush and then trim the area that is going to be branded. Clean the area with a Isopropyl Alcohol soaked cloth.

4



Spray Isopropyl Alcohol on the shaven area just before branding.

5



Apply the branding iron on the area and hold for 45 seconds, press firmly for best results.

6



After branding, the branded area will have a clear indent.

7



Place branding iron back into the dry ice mixture, allow 5 minutes to cool in between branding.

8



The branded area will swell 5 minutes after branding and 7 days later the area will form a scab.

9



40 days later new white hair will be visible.

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## FREEZE-BRANDING CATTLE

### **HOW DO I STORE DRY ICE?**

Use an insulated cooler or polystyrene container. We can supply you with the perfect size polystyrene container, or you can wrap the dry ice in newspaper or a blanket to extend the life even further if necessary. Remember, do not store dry ice in your freezer at home!

### **WHAT ABOUT SAFETY?**

Dry ice is not for human consumption. Handle it only with protective gloves or mitts. Transport only in complete isolation from the driver. Do not place dry ice in any gas-tight container. It sublimates and expands! Keep dry ice away from children (adult supervision is required).

### **WHAT is DRY ICE?**

It is frozen carbon dioxide (CO<sub>2</sub>), which remains at -79 °C. It is a non-toxic, non-flammable food-grade product, which sublimates from a solid directly to a gas - no liquid or water is left behind. The sublimation creates the cooling effect. The energy value of dry ice is 570 kJ/kg.

### **DELIVERY**

Dry Ice International carries out dry ice deliveries countrywide on a 24-48 hour basis. Dry ice may be ordered on our website and be delivered to your doorstep. Dry ice can also be collected at any of our retail outlets.

### **MORE ABOUT US**

Dry Ice International has been providing the South African industry with innovative dry ice technology and solutions since 1994. We are known for our dedicated national client service, creativity, innovation and team of highly qualified and experienced personnel.



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