



Walmay Medical

PRODUCTS

USE AND MAINTENANCE INSTRUCTIONS

FOR THE WALMAY CRYOSPRAY MODEL WM227



Your Walmay Cryospray unit contains:

- 1 Cryospray Flask with Turret and Probe attached
- 1 Tray holder for Spray Tips
- 5 Spray Tips (No. 1,2,3,4 & Curved)
- 1 Carry Bag



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Walmay Medical
PRODUCTS

Cryospray
WM227

For the controlled
application of
liquid nitrogen
in Cryosurgery.

ARTG No. 170073 **CE** 2460

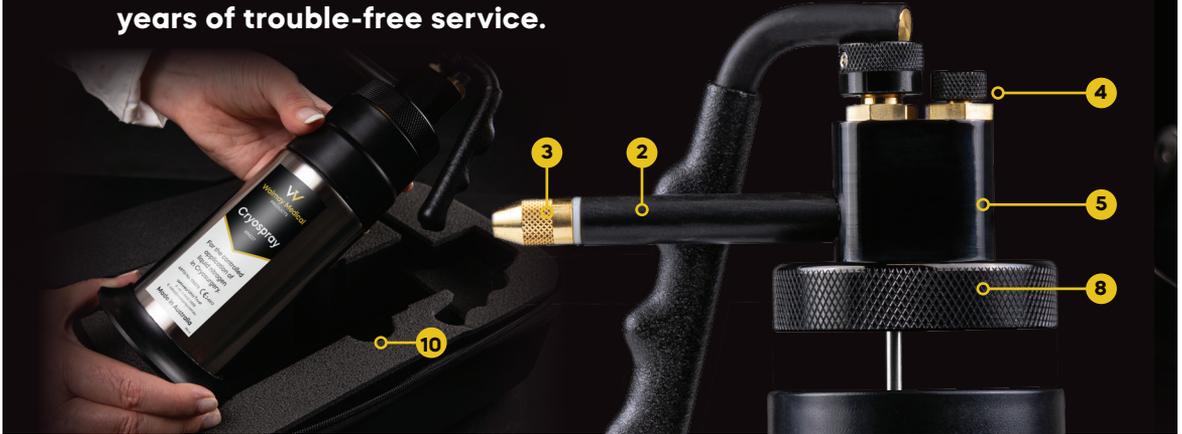
Walmay Unit Trust
P. +61 2 9432 2899
E. sales@cryospray.com.au

Made in Australia

REV.4

Assembly

If you follow these directions carefully, the Walmay Cryospray will give years of trouble-free service.



1. Remove Flask, Tips and Tray from the Carry Bag 10
2. Select a Spray Tip 3 and holding the knurled end of the Probe 2, screw it onto the brass outlet thread.
3. The Regulator handle 1 must be positioned either left or right, and adjacent, to the Probe 2 according to how it feels comfortable for use of the instrument.
4. Ensure the Flask Collar 6 is firmly in place covering the flask thread 7. Screw the Turret 8 onto the flask. Rotate the flask half a turn anticlockwise to engage the thread, then screw the flask and turret together.



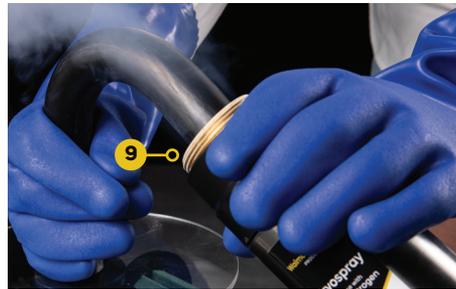
This Instrument is to be used by Trained and Qualified Health Professionals. The intended use is for dispensing Liquid Nitrogen for the freeze destruction of tissue in cryosurgery applications.

Filling the unit



1. Unscrew the Turret **8** from the Flask **7**.
2. Insert the WALMAY LIQUID NITROGEN EXTRACTOR into the Dewar pushing it down until the rubber stopper seals the Dewar opening. Immediately the nitrogen will begin to boil and pressurise the Dewar forcing liquid up the Extractor. Hold the open neck of the Flask approximately 5cm below the end of the extractor to catch the flow of liquid nitrogen. When the Flask is filled to the desired level, lift the Extractor out of the Dewar. This allows the pressure in the Dewar to subside and flow of nitrogen ceases.
3. Keep the Flask in an upright position and firmly screw the Turret onto the brass Flask top.
4. The Flask will self pressurise and be ready for use in approximately 60 seconds.

Note: LN is not under pressure in its natural state. Due to the steep thermal gradient, LN starts to boil when the Flask is filled, and the gas pressurizes the instrument as the Turret is screwed into place. This is why filling to 75% of capacity is recommended. It allows the unit to maintain pressure and is sufficient LN for a surgery session. If the Cryospray does not pressurize within 60 seconds, ensure the Turret is sealed onto the Flask. Keep Flask in upright position.



CAUTION
The temperature of Liquid Nitrogen (LN) is -196°C. Before handling LN obtain a Material Safety Data Sheet from your supplier.



CAUTION
Always use suitable protective clothing. Do not overfill. Walmay recommend filling to 75% of Flask capacity. See following Note.

5. The Flask may be topped up at any time. Raise the knurled brass Safety Valve **4** to release the internal pressure, taking care to keep your hand away from the Safety Valve vent **5**. The Turret may then be unscrewed and the Flask refilled.

Note: Liquid Nitrogen is colourless and odourless. The Vapour **9** produced in the process of filling the Flask is caused by extreme cold condensing humidity in the air.

Operation and maintenance



The WALMAY Cryospray is operated by the Regulator control handle **1**.

Grip the Cryospray around the black Flask Collar **6** over the Flask neck, with the first fingers lightly resting on the handle. Squeezing the handle inwards opens the Regulator and nitrogen begins to flow.

Using the coned point of the Tip as an accurate aiming device, position the Tip orifice approximately 5mm from the lesion being treated.



During extensive use of the WALMAY Cryospray, depending on ambient humidity, condensation will form on the Spray Tip, Probe and possibly the Turret. Continuing use will turn this condensation into ice crystals. This may cause the regulator to remain slightly open allowing a small trickle of nitrogen to continue flowing. This may be overcome by:-

- a. Swinging the Regulator handle **1** from side to side a couple of times, breaking the ice in the valve.
- b. Depressurise the unit by lifting the knurled brass Safety Valve **4** and allow the Turret to warm at room temperature.

From time to time you may hear a phzzz from the unit. This is the Safety Valve venting pressure and it is quite normal.

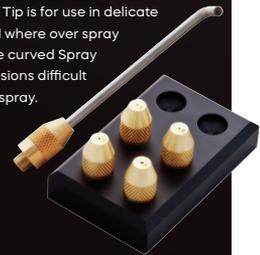
On completion of treatment for the day, allow the remaining nitrogen to evaporate overnight. Do not open the Flask and discard the nitrogen, as this may allow condensation and moisture build up within the mechanism.



Spray Tips Set

There are five Spray Tips provided with the Cryospray. Four cone shaped Tips and one long curved Tip. The cone Tips are numbered 1, 2, 3 and 4 adjacent to the orifice. Number 1 has the smallest orifice and Number 4 has the largest orifice. Try all four Spray Tips to experience the volume and spread of liquid nitrogen delivered by each one. This will help you in assessing which Tip to use for any particular treatment.

Note: When No.1 Tip is used, Liquid Nitrogen Spray will be intermittent. This Tip is for use in delicate areas, e.g. on the eye lid where over spray could be dangerous. The curved Spray Tip is for treatment of lesions difficult to reach with a straight spray. The Spray Tip can be changed at any time during a treatment simply by removing the attached Tip and replacing it.



It is recommended that the Walmay Cryospray is cleaned between patients. The Cryospray Tip should not come into direct contact with the patient, so infection risk is low. Wipe the Unit and Tip with hospital grade instrument cleaner. If considered desirable, a solution, such as Milton, may be used in accordance with the manufacturers MSD, eg. Milton 2% - For Hospital Use Dilution Chart. The Tips may be autoclaved – refer to the autoclave manufacturers recommendations.

Wipe the stainless steel Flask and Turret with a dry soft cloth at the finish of the day's procedures.

If you have a problem with the Walmay Cryospray, ring Walmay on **02 9432 2899** or email **service@cryospray.com.au** before returning it for service. Most problems can be resolved over the phone. However, we recommend that the unit be serviced on a 12 monthly basis.

Our address for servicing equipment is:

Walmay Medical Products
Unit 4 / 6 Carnarvon Road
West Gosford, NSW, 2250

Note: It is important to keep your storage of liquid nitrogen clean. Over time moisture in the Dewar can turn to slush or ice crystals, and lint etc. will accumulate. Before filling the Dewar every second time, swirl the last two litres of nitrogen around the bottom and empty it out of doors. Failure to do this may introduce contaminating matter into the Flask and stop the Regulator or Safety Valve from properly sealing. The Gauze Strainer (12) on the bottom of the Siphon Tube (11) will reduce the risk of contamination. If this occurs the Cryospray will have to be returned to WALMAY for service. A charge will apply.



NOTE: Do not flush the Walmay Cryospray with water.

Cryospray Warranty Terms & Conditions



Walmay Medical Products ABN 41 479 956 939 (“Walmay”) warrants that during the Warranty Period, the Cryospray will, with normal use and service, be free from faulty parts, manufacture or workmanship. This warranty is subject to written approval by Walmay. If a defect in the Cryospray arises during the Warranty Period and Walmay decides that such defect meets the terms and conditions under this warranty, Walmay will, at its cost and option, and subject to these terms and conditions, repair or replace that Cryospray.

The Warranty Period is (5 Years) 60 months from the date of purchase.

This warranty applies where a defect has arisen, wholly or substantially, as a result of faulty manufacture, parts or labour. The warranty does not apply where damage is caused by other factors, including without limitation:

- a. normal wear and tear
- b. abuse, mishandling, accident or failure to follow operating instructions;
- c. servicing or modification by other than Walmay;
- d. shipment or other transport damage.

This Warranty does not cover the cost of transport to or from Walmay.

The following statement only applies to a consumer sale of goods or services as defined in the Australian Consumer Law. In this statement, “Our” means Walmay and “You” means the purchaser.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage.



The benefits given to the purchaser in this warranty are in addition to other rights and remedies under a law in relation to the goods or services to which this warranty applies.

 **CAUTION**
Ensure good ventilation of the area being used for filling operations.

 **CAUTION**
Always use suitable protective clothing. Do not overfill. Walmay recommend filling to 75% of Flask capacity. See following Note.

 **CAUTION**
Be careful not to drop the Cryospray.

 **CAUTION**
Do not return unused nitrogen to the Dewar. Some bacteria spores or viral particles can be preserved in liquid nitrogen and become viable after thawing.




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ARTG No. 170073  €2460

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Walmay Medical PRODUCTS

To register your warranty
complete the online form at
cryospray.com.au/register
or scan the QR code



Returning a Cryospray to Walmay Medical Products:

1. You must inform Walmay as soon as the warranty claim arises by ringing **02 9432 2899** or email service@cryospray.com.au
2. Please send your Cryospray to:

Walmay Service Department,
Unit 4/6 Carnarvon Road
West Gosford NSW 2250

with a written description of the fault, along with your name and return address details.
3. You are responsible for all packaging, freight and insurance costs for transport to and from Walmay.

If the warranty claim is accepted by Walmay, Walmay will, at its costs, repair or replace a faulty part or rectify any faulty workmanship.

The Cryospray will be returned to you at your cost.
4. The acceptance or rejection of a warranty claim is at the absolute discretion of Walmay.