

# Micro-Mist

## SURFACE DISINFECTING SYSTEM

# SAFETY, OPERATION & MAINTENANCE INSTRUCTIONS



**MODELS: MICRO-MIST M500** 

- CAUTION READ THE INSTRUCTION MANUAL BEFORE USING THE APPLIANCE
- ORIGINAL INSTRUCTIONS
- MANUAL ALSO AVAILABLE ON LINE AT <u>WWW.PROCHEM.CO.UK</u>

# **MACHINE DATA**

MODEL NO.	
SERIAL NO.	
DATE OF PURCHASE	
DISTRIBUTOR NAME	
DISTRIBUTOR TEL NO.	
MANUFACTURER CONTACT	Prochem Europe Ltd. Oakcroft Road, Chessington, Surrey KT9 1RH, UK Telephone: + 44 (0)20 8974 1515 Fax: + 44 (0)20 8974 1511 Email: sales@prochem.co.uk Website: www.prochem.co.uk

All information and specifications in this manual are current at the date of issue. However, because of Prochem Europe policy of continual product improvement, we reserve the right to make changes at any time without notice. Please note that this manual applies to all models and explains variations including accessories used. Therefore, you may find some explanations for variations and options not installed on your equipment.

# **CONTENTS**

	PAGE NO.
WARRANTY	5
WARNING SECTION	6
IMPORTANT SAFETY INSTRUCTIONS	7
GENERAL DESCRIPTION OF APPLIANCE & IMPORTANT OPERATING INSTRUCTIONS	8
GENERAL OPERATING INSTRUCTIONS	9
UNDERSTANDING YOUR MICRO-MIST UNIT	10
CHEMICALS	12
OPERATING INSTRUCTIONS	13
GENERAL MAINTENANCE	14
TROUBLESHOOTING SECTION	16
MACHINE PARTS DIAGRAM & PARTS LIST	20
PUMP PARTS LIST	23
MISTING GUN PARTS LIST	24
WIRING DIAGRAM	25
CE DECLARATION OF CONFORMITY	26



This product is marked according to the European Directive (2002/96/EC) on Waste Electrical and Electronic Equipment (WEEE).

The symbol on this product indicates that this product must not be disposed of with normal household waste. Please protect human health and the environment by disposing of this product responsibly in the correct manner.

For further information regarding the disposal, treatment, recycling and recovery of this product, please contact:

Prochem Europe Sales Department Telephone: +44 (0)20 8974 1515

Prochem Europe Ltd. EEE Producer Registration Number: WEE / AJ0044SY

European Directive (2011/65/EU) Restriction of use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS2).

This equipment does not contain more than the maximum permitted levels by weight of the following substances:

Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr (VI)), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE)



#### **MACHINE WARRANTY**

**DATE EFFECTIVE: 1/7/15** 

As of the above date, this warranty supersedes all previous warranties and forms part of the contract of sale.

Prochem Europe Ltd. (hereafter referred to as "Prochem") guarantees this machine to be free from defects in materials and workmanship for the relevant time period as shown below, and from the actual date of purchase by the user. Proof of the purchase date from a Prochem Authorised Distributor will be required for performance of this warranty.

THIS WARRANTY EXCLUDES NORMAL MAINTENANCE ITEMS, including but not limited to HOSES, FILTERS, O-RINGS, DIAPHRAGMS, VALVES, DRIVE BELTS, GASKETS, CARBON BRUSHES and damage to motors and other components as a result of failure to replace normal maintenance items. THIS LIST IS NOT EXHAUSTIVE.

#### To obtain performance of this warranty, contact the Prochem Authorised Distributor who supplied the product.

The Prochem Authorised Distributor is responsible as the selling agent for the provision of initial training in the correct use and application of the machine and approved chemicals. The distributor is also responsible for service maintenance and repairs during and after the warranty period and the administration of any warranty claims in conjunction with the Prochem Service Department. Failure of any of these provisions and responsibilities may invalidate the warranty and the authorised status of the distributor.

If Prochem receives notice of any defects during the warranty period, Prochem reserves the right to either repair, or replace components that prove to be defective. Goods must be returned before the warranty is approved. Goods sent out prior to the return of faulty items will be invoiced at current prices, subject to standard payment terms (see Prochem Standard Terms and Conditions of Sale). Replacement parts supplied under warranty will be guaranteed for the remainder of the original machine warranty and **NOT** from the date of installation. Spare parts supplied after expiry of machine warranty may be covered by a manufacturer's warranty, subject to inspection by Prochem Europe Ltd. and at its sole discretion. Normal maintenance items, however, are not covered. Replacement or credit of any returned parts will be at the discretion of the Prochem Service Department. Any subsequent refusal to accept their decision will serve to invalidate this warranty with immediate effect.

**PROCHEM AUTHORISED DISTRIBUTORS** are responsible for machine and accessories service back up during and after the warranty period. Prochem will furnish parts if the warranty is approved, but **DISTRIBUTORS** will be responsible for fitting, service, labour and related charges including travel, if applicable, and the cost of returning the machine or parts to Prochem. If any chargeable work is undertaken by Prochem for **DISTRIBUTORS** the labour, parts (if applicable) and return carriage will be charged at **FULL LIST PRICE**. If warranty is approved due to genuine manufacturing defect, then labour charges and carriage charges may be waived at Prochem's discretion.

Prochem may send replacement parts to customers supplied by a **DISTRIBUTOR** or directly by Prochem, subject to the same conditions of replacement and payment above. The customer, however, will be responsible for fitting, labour and the carriage costs of returning repaired parts. Alternatively, Prochem will undertake warranty work at Chessington, subject to the same conditions, but the customer will be responsible for all carriage charges.

Any of the following circumstances involving the machine will serve to invalidate this warranty:-

NORMAL WEAR, ACCIDENTS, USE OF THE MACHINE FOR A PURPOSE OTHER THAN THAT FOR WHICH IT WAS INTENDED, INCORRECT MAINTENANCE, THE USE OF CHEMICALS OTHER THAN THOSE SUPPLIED OR APPROVED BY PROCHEM, INCORRECT INSUFFICIENT OR NON-USE OF DEFOAMER, EXPOSURE TO EXTREME TEMPERATURES OR CONDITIONS, INCORRECT INSTALLATION OR REPAIR & UNAUTHORISED INTERVENTION.

#### Liability is excluded for the following:-

All forms of damage and special damage founded in tort (apart from death and personal injury) and contract law including but not limited to consequential loss, loss of income and losses incurred in reliance of the contract; service, labour or third party charges and the cost of returning the machine or defective parts to Prochem or Prochem's Authorised Distributor.

As against a person dealing as a consumer, this warranty creates specific rights in addition to any statutory rights, which are unaffected. As against a person dealing otherwise than as a consumer, however, this warranty excludes any implied term that the machine will correspond with a description or a product sample.

With the exception of some specific products which are labelled and intended to be used by a consumer, all equipment, machinery, accessories, products, services and advice supplied by Prochem is intended for professional and industrial use only.

Your Prochem unit is designed to give you many years of reliable service. If a problem should arise during or after the warranty period, contact the Prochem Authorised Distributor or the Prochem Service Department, for details of the services available. Only the original purchaser of the new equipment may seek performance of this warranty – these rights cannot be transferred to a third party.

Prochem Europe Ltd.

Oakcroft Road, Chessington, Surrey KT9 1RH, ENGLAND Telephone: + 44 (0)20 8974 1515 Fax: + 44 (0)20 8974 1511

Machine Warranty Issue 10 1/7/15

#### **WARNING!**

#### Warning!

Machines shall not be used by children. Children should be supervised to ensure that they do not play with the appliance. This machine can be used by people with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the machine in a safe way and understand the hazards involved.

- Caution this machine is for indoor use only.
- Caution this machine shall be stored indoors only.

#### Warning!

This machine must be disconnected from the mains during cleaning or maintenance, when replacing any parts or converting the machine to another function.

• **Caution** under no circumstances should the machine be carried by or bumped up a flight of stairs using the handle, always empty the bucket before storage or transporting the machine.

#### IMPORTANT SAFETY INSTRUCTIONS

PLEASE READ THE FOLLOWING IMPORTANT SAFETY INSTRUCTIONS (!!) BEFORE ATTEMPTING TO USE THIS MACHINE. FAILURE TO OBSERVE THE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

#### !! CAUTION

Read the instruction manual before using the appliance.

#### !! SOUND PRESSURE LEVEL

The sound pressure of this machine, when in use, does not exceed 85 dB (A).

#### !! APPLIANCE SUITABILITY

This appliance is suitable for commercial use, for example, in hotels, schools, hospitals, factories, shops, offices and rental businesses.

!! FOR MAINS POWERED APPLIANCES during cleaning and maintenance – the plug is to be removed from the outlet socket.

#### !! TRAINING

You must be trained in the operation of this machine before use. Please read this manual carefully and obtain operating instruction from your Prochem Distributor or authorised representative in the correct use of this equipment and suitable chemicals before attempting to clean.

#### !! REPAIRS

Should any repairs, including supply cord replacement be required, we recommend that the appliance be returned to an authorised dealer.

# !! ELECTRICAL CABLE INSPECTION & REPLACEMENT

This machine must be earthed while in use to protect the operator from electric shock. It is equipped with a sealed and approved EC three conductor cable and three-prong 13A plug. If the supply cord is damaged it must be replaced by a special cord or assembly available from the manufacturer or its service agent. During operation a hazard may occur when running the machine over the power supply cord. The power supply cord should be regularly inspected for signs of damage. If the power supply cord is damaged, it must be replaced.

#### !! RCD CIRCUIT BREAKER

In common with other household and commercial electrical equipment, an 'RCD' circuit breaker plug device is strongly recommended for this type of equipment.

#### !! EXTENSION CABLES

Avoid using extension cables with this machine. If an extension cable is used it should be of a suitable rating and no longer than 30 metres. Use only three wire CE approved extension cable with CE approved three-prong earthed plugs and three pole receptacles that accept the machine 13 amp plug.

!! DO NOT use a multiple adaptor socket to connect the machine and heating units or other devices to a single extension cable.

!! DO NOT stand the machine in water to operate such as during flood extraction.
SERIOUS INJURY OR DEATH MAY RESULT IF MACHINE IS IMMERSED IN WATER!

!! DO NOT pull the machine by the power cable or hoses.

!! DO NOT use this machine with or near flammable vapours. These machines can ignite flammable vapours such as fuels, solvents or thinners. Do not use where oxygen or anaesthetics are used.

!! DO NOT operate the machine unless it is completely assembled.

!! DO NOT attempt repairs or maintenance unless you are suitably qualified or experienced. Repairs and maintenance should only be performed by qualified personnel and the machine should be tested for electrical safety before re-use.

!! SPRAY LIQUID ejection could be hazardous as a result of its temperature, pressure or chemical content.

!! ALWAYS disconnect machine from mains supply when left unattended, when emptying the waste container, filling the solution tank or cleaning the appliance.

#### GENERAL DESCRIPTION OF APPLIANCE

The Micro-Mist Machine is a surface disinfecting spray unit for use with Prochem D500 Microsan® and B125 Clensan®. The machine incorporates a solution hose assembly and a misting gun.

The machine has a disinfectant solution tank and a caddy for the storage of solution containers and PPE.

#### IMPORTANT OPERATING INSTRUCTIONS

PLEASE READ THE FOLLOWING IMPORTANT OPERATING INSTRUCTIONS (!) BEFORE ATTEMPTING TO USE THIS MACHINE. FAILURE TO OBSERVE THE INSTRUCTIONS MAY RESULT IN DAMAGE TO THE EQUIPMENT.

! DO NOT expose the machine to rain or freezing temperatures. Drain solution system and store indoors when not in use.

! DO NOT operate the machine without solution.

! DO NOT use boiling water or temperature in excess of 76°C.

! DO NOT use chemicals in the machine other than those manufactured or recommended by Prochem Europe.

! DO NOT run the solution pump dry. Always switch off and disconnect the machine electrical supply when re-filling with solution.

! ALWAYS use a clean bucket to fill the disinfectant solution tank. Do not overfill the solution tank.

! AFTER USE flush solution system with clean water.

! ALWAYS observe directions and safety precautions on chemical products.

! ALWAYS pre-test surfaces to be treated with ready-to-use disinfectant solution before proceeding.

! **USE ONLY** genuine replacement parts for this machine, supplied by an authorised Prochem Distributor.

! DO NOT use this machine for any purpose other than for its intended design function. Any deviation from its proper use or purpose and any consequential damage that may occur is the sole responsibility of the user. ! DO NOT allow people or pets to be present in the area during spraying and do not allow people or pets to return to the area until all surfaces are dry and/or rinsed, extraction cleaned, wiped or mopped in accordance with recommended treatment procedures.

#### ! CHEMICAL SAFETY PRECAUTIONS

! USE ONLY Prochem D500 Microsan® or B125 Clensan® solutions in the Micro-Mist machine.

! DO NOT use hazardous chemicals, other disinfectants or bleach in the Micro-Mist machine.

! ALWAYS observe safety precautions on Microsan and Clensan product labels and Safety Data Sheets (SDS). Keep containers labelled and SDS with the machine at all times.

#### ! PPE PERSONAL PROTECTIVE EQUIPMENT

! Prochem Europe **strongly recommend** mandatory use of the following PPE when using this machine:-

Eye / Face Protection: Safety goggles (enclosed eye protection) and/or face shield.

Respiratory Protection RPE: Respirator with particle filter P3 or FFP2/3 membrane face mask with seal and valve EN13274-7:2019

Hand Protection: Nitrile gloves

**Outer Clothing:** Tyvek® coverall with head covering for overhead spraying.

#### **GENERAL OPERATING INSTRUCTIONS**

# BEFORE OPERATING THE MACHINE

Read the manual carefully and completely before attempting to operate the unit. This manual has important information for the use and safe operation of the machine and should be kept available at all times. This machine will ensure years of satisfactory service if operated and maintained according to recommendations in this manual. If additional help or information is needed, please contact your distributor or Prochem.

Prochem machines have been designed with the operator in mind. Provided you read the instructions relating to the care of your machine and follow them carefully and take advantage of the helpful hints and advice that we have passed on, you will achieve excellent results and very quickly pay for your investment. A detailed operational guide is given in the following sections, however, the following important points must be emphasised.

# FAILURE TO OBSERVE THESE INSTRUCTIONS MAY SERIOUSLY AFFECT THE PERFORMANCE OF THE MACHINE AND INVALIDATE THE WARRANTY

- Connection instructions The 220 240V AC models have been fitted with the appropriate EC type sealed power cable and 3 prong 13 amp plug for the UK market. Ensure the machine is connected to a 13 amp socket outlet having the same configuration as the plug. No adapter should be used with this machine. Any modification to the plug type may be dangerous and will void the warranty.
- This equipment is intended for commercial use only.
- The machine is designed for use with the supplied misting gun to apply Prochem D500 Microsan® or B125 Clensan® to hard and soft surfaces.
- Disconnect the power cord from outlet before servicing. Do not leave machine connected to an electrical outlet when unattended.
- Do not immerse or use this machine in standing water. Such use may cause electric shock.

- This equipment is not designed to handle or use combustible/volatile substances such as gasoline, liquid solvents or kerosene, in, on, or near the machine. The use of such materials will cause an extreme hazardous condition.
- Do not use water in excess of 170°F (76°C).
- To prevent seal damage and chemical build-up to the pump system, run clean water through the solution lines after each day's use.
- All repairs must be carried out by an authorised Prochem distributor.
- Repairs should only be carried out by a qualified person.
- Do not use replacement parts other than genuine manufacturer's parts as specified in the parts list.
- Do not use chemicals in the machine other than those supplied or approved by Prochem Europe limited.
- Keep the solution tank and filter clean. Always use a clean bucket to fill the solution tank.
- After use, flush through the pump, solution lines and waste tank with at least two gallons of hot water.
- Do not allow the machine, hoses or tools to freeze. Freezing may seriously damage the pump and fittings. Always drain solution and store indoors when not in use. When in transit during freezing weather, insulate and cover machine, misting gun and hoses.

#### UNDERSTANDING YOUR MICRO-MIST UNIT.

#### **OVERVIEW**

The Micro-Mist machine has only one mechanical part, this is a 220psi 230V DC drive Diaphragm pump. The pump is operated by a switch on the main body of machine close to the main solution outlet.

The pump forces a pressurized solution from the solution tank via a high-pressure solution hose and a misting gun to the surface being disinfected.

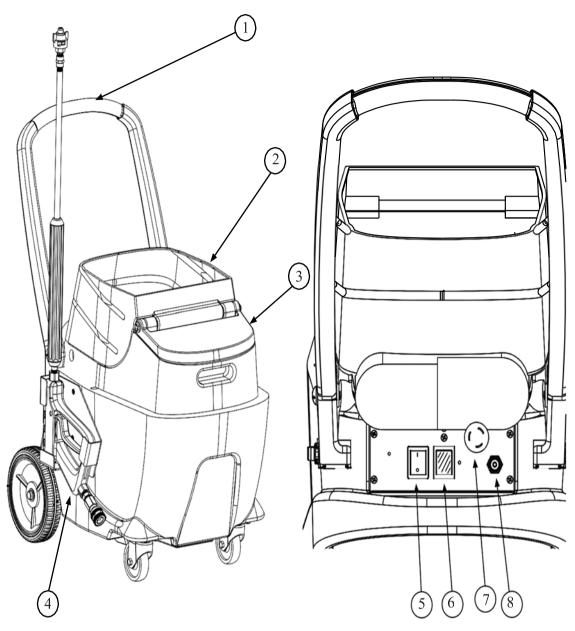
The misting gun has a nozzle that creates the correct size of mist droplet to adequately sanitize the surface being treated, this is matched to the pressure and flow rate that the pump supplies.

#### **SOLUTION SYSTEM**

The quick connectors on each end of the solution hose are connected to the machine and the misting gun via female quick release couplings (see fig 1 below), completing the solution circuit from the solution tank via the pump to the gun nozzle. The female couplings incorporate a pull-back release ring which houses steel ball bearings. These should be lubricated regularly otherwise connection may become difficult.

- Always check that the filter in the solution tank is in good condition. Remember that the filter is there to protect the pump from dirt and fibres and it is a lot easier and cheaper to replace the filter than it is the pump!
- Always use a clean bucket when you replenish your solution tank. This help will prevent soil and sediment from entering the cleaning solution tank and pump system





Item Number	Description
1	Handle
2	Storage Compartment
3	Solution Tank Access
4	Misting Gun holster Bracket
5	Pump Power Switch
6	Blank Switch Cover
7	Power Cord
8	Pressure Outlet

## **CHEMICALS**

**Prochem** specialize in the manufacture of chemical products for use on soft furnishings and hard surfaces, this section deals with the products recommended for use with the **Micro-Mist unit**.

#### **Prochem D500 Microsan® Concentrate**



#### **Product Description & Directions for Use:**

A multi-surface biocidal cleaning concentrate for hard surfaces, floors, carpets and upholstery. Efficacy & Standards: European Test Standard EN1276, Bacteria including - E coli, MRSA, Listeria, Salmonella. EN14476 Viruses including - Hepatitis B, HIV-1, HBV, HCV, Coronavirus, Ebola, Measles. WoolSafe approved maintenance product for wool carpets and rugs. **For professional and industrial use only.** Solutions should always be freshly prepared. Always wear protective gloves, overalls, mask and eye protection when cleaning blood, bodily

fluids and sewage material. DO NOT MIX MICROSAN WITH OTHER DETERGENTS.

Standard solution (all surfaces): Mix 20ml of Microsan concentrate per litre of water (2%).

Heavy soil: Mix 60ml of Microsan concentrate per litre of water (6%).

Carpets, upholstery and other sensitive surfaces should always be pre-tested for colour fastness, texture change and suitability before proceeding. Apply mixed solution by sprayer to contaminated surfaces and allow 15 minutes contact time before rinsing. For decontamination of Hepatitis B and HIV-1 virus allow a minimum of 30 minutes contact time before rinsing. Carpets and fabrics should be extraction rinsed with B109 Fibre & Fabric Rinse.

Please refer to product label, product specification sheet and product safety data sheet for full information.

#### **Prochem B125 Clensan® Concentrate**



#### **Product Description & Directions for Use:**

A concentrated multi-surface biocidal sanitiser for use on carpets, upholstery, floors and hard surfaces. Clensan's biocidal formula is approved to EN1276 and EN14476 and is effective against a wide range of harmful organisms including bacteria and viruses. WoolSafe approved maintenance product for wool carpets and rugs.

For professional and industrial use only.

Dilution rate\* (all surfaces): Mix 50ml of Clensan per litre of water.

(1 part Clensan to 20 parts water). Solutions should always be freshly prepared.

Norovirus: Mix 160ml of Clensan per litre of water and allow 60 minutes contact time for effective disinfection. Carpets & Upholstery: Always pre-test carpet or fabric with ready-to-use Clensan solution for colour fastness and texture change before proceeding. Apply Clensan solution by spray applicator to carpet or fabric surface and allow 5 to 15 minutes contact time for effective sanitising. Extraction rinse carpet or fabric with B109

Fibre & Fabric Rinse.

Floors and Hard Surfaces: Always pre-test surface to be treated with ready-to-use Clensan solution before proceeding. Apply Clensan solution by spray applicator and allow 5 to 15 minutes contact time for effective sanitising. Wipe hard surfaces or rinse floors with water then mop or extract with wet pick-up vacuum. When using scrubber driers always check recovery tank for excessive foam and use defoamer if required.

Clensan solutions should always be freshly prepared.

Do not mix Clensan with other chemicals or detergents.

Please refer to product label, product specification sheet and product safety data sheet for full information.

#### **OPERATING INSTRUCTIONS**

#### **PUTTING INTO SERVICE**

Ensure the handle is in the upright and locked position.

Ensure all switches are in the off position.

Pour Microsan® or Clensan® mixed solution into the solution tank using a bucket with pouring lip. Do not overfill the solution tank. Use only approved correctly diluted chemical (see page 12 of this manual and product label for correct dilution rates).

Connect the solution hose quick connector from the Misting Gun to the quick connector on the back of the machine. (Pull back outer sleeve on female connector and push fit onto male connector so that the outer sleeve snaps shut).

When moving the machine from place to place use the handle in the locked position and wheel using the two rear wheels and front castor wheels.

The machine must be used in an upright condition on a flat and level surface

#### **OPERATING INSTRUCTIONS**

Important: Use only the Prochem misting gun supplied with the Micro-Mist unit. It is designed to deliver and maintain the correct amount of solution and pressure when attached to the Micro-Mist pump system. Use of other manufacturer's equipment may cause over-wetting of surfaces, damage to the pump system and lack of pressure.

Plug the machine into a suitable electrical outlet.

Turn on the Pump switch.

Squeeze the trigger on the misting gun and apply the mist to the surfaces that you wish to disinfect.

Carpets and soft furnishings may require a slightly longer misting period, but do not over wet.

It is recommended that hard surfaces and floors are wiped down or mopped after 15 to 30 minutes contact time. Carpets and upholstery should always be pre-tested before application. Carpets should be extraction rinsed with B109 Fibre & Fabric Rinse after 15 to 30 minutes contact time. Fabric upholstery should be rinsed or wiped down with B109 Fibre & Fabric Rinse after 15 to 30 minutes contact time.

When the solution tank is empty it can be refilled, *please turn off the pump and remove the plug from the power outlet whilst carrying out this operation.* 

When the job is completed, turn all switches off, disconnect power cable from the power outlet, squeeze the gun trigger to release any pressure and disconnect the solution hose from the misting gun and the machine.

#### STORAGE AND TRANSPORTATION

The machine can be prepared for storage (indoors only), by ensuring the power cord is coiled and secured using the velcro strap provided.

The solution tank is empty and clean.

The handle is locked in the storage position.

Transporting the machine to another site in a vehicle can be carried out if the previous conditions are met but the machine must be securely stowed.

If the machine is to be lifted into a vehicle two lifting points are supplied one being the handle recess on the front of the machine and the other the rear bottom edge of the machine.

Due to the weight of the machine it may require two people to lift it into any vehicle, or carry it upstairs.

**Caution,** under no circumstances should the machine be bumped up a flight of stairs using the handle, always empty the bucket before storage or transporting the machine.

#### **USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Operation of this machine requires the mandatory use of PPE as specified below.

Eye / Face Protection: Safety goggles (enclosed eye protection) and / or face shield.

Respiratory Protection RPE: Respirator with P3 particle filter or FFP2 or FFP3 membrane face mask with seal and valve tested to EN13274-7:2019

Hand Protection: Nitrile gloves

Outer Clothing: Tyvek® coverall with head covering (for overhead spraying).

#### GENERAL MAINTENANCE

All Prochem machines are engineered and built to require a minimum of maintenance. But like any machine, it does require some care to keep it in optimum working condition. Careful attention to these maintenance instructions will give you maximum operating performance and will increase the life expectancy of the machine. To ensure a trouble-free machine, we strongly advise the following preventative maintenance.

#### **DAILY MAINTENANCE**

The following should be carried out at the end of each disinfecting session.

#### **POWER CABLE & PLUG**

Check the condition of the power cable and plug. Make sure all wires are correctly located and tightly connected. If damaged, the power cable and plug assembly must be replaced. The plug should never be replaced on its own a complete power cable assembly should be fitted with A MOULDED PLUG.

#### DO NOT ATTEMPT REPAIR.

Instruction for replacement of power cable with combined plug (all machines)

!! CAUTION - ONLY QUALIFIED MAINTENANCE PERSONNEL SHOULD ATTEMPT THE FOLLOWING REPAIR

Should the power cable require replacement, please follow the instructions below.

- 1. The replacement cable and plug shall be of the same specification as the original Prochem part number BE4901A (3 core 1mm with 13Amp sealed plug unit)
- 2. Ensure that machine is disconnected from electrical supply and open electrical housing by means of tool required.
- 3. Disconnect the live (brown), neutral (blue) and earth (green/yellow) wires from the cable terminal block by means of unscrewing the terminal block wire clamp screws.
- Release the outer cable clamp next to the terminal block by unscrewing the two securing screws, then
  unscrew the outer cable gland to release the cable which can then be pulled out of the cable gland assembly.
- 5. Insert the new cable through the gland, then secure and clamp the outer cable by means of tightening the outer cable gland and the two securing screws next to the terminal block.
- 6. Connect the live (brown), neutral (blue) and earth (green/yellow) wires to the cable entry gland terminal block by means of inserting the wire conductors into the terminal block as follows:

  The conductor of the wire coloured brown shall be connected to the terminal marked (L), the conductor of the wire coloured blue shall be connected to the terminal marked (N) and the conductor of the wire coloured green and yellow shall be connected to the terminal marked with the Earth symbol thus -
- 7. Ensure that all connections are secure and close machine electrical housing and secure with tool required

#### SOI UTION TANK

Flush the solution tank and pump through with 10 litres of warm to hot water. Check the **filter** and clean if necessary. **DO NOT** store hand tools, cables or hoses in the solution tank as this may damage the filter.

#### **MISTING GUN**

Inspect the gun for any damage, ensure the misting tip is clean and fee of any debris. Strip and clean the nozzle and filter assembly if required - **DO NOT use metal or wire.** 

#### Check all nuts and bolts and tighten if necessary

Pay particular attention to the handle, base-plate and wheel axle shaft securing bolts.

Always keep the machine clean inside and out.

#### **WARNING! FREEZING PROTECTION**

If your Micro-Mist machine is exposed to freezing weather with solution in the components, the solution will **FREEZE** and, in most cases **SERIOUSLY DAMAGE** the machine. To avoid damage, consider the following in the winter season. When the machine is not in use, store it in a **heated building**. This is particularly important in the case of the misting gun, which are fitted with brass valves. To avoid freezing between jobs, pump out all the cleaning solution from the machine, hose and misting gun and make sure the misting gun is insulated from the vehicle floor (wrap in a blanket or tarpaulin).

#### **WEEKLY MAINTENANCE**

At least once a week, inspect the internal components, solution fittings and electrical connections. Check for signs of **fluid leakage** and tighten or replace fittings as necessary. Make sure all **electrical connections** and **cables** are in place.

#### Quick connect coupler

Spray with WD-40 or equivalent lubricant to prevent the coupler from sticking.

#### **SOLUTION PUMP**

!! CAUTION - ONLY QUALIFIED MAINTENANCE PERSONNEL SHOULD ATTEMPT THE FOLLOWING REPAIR

A diaphragm type pump is fitted to your Micro-Mist machine, this pump type requires very little maintenance other than occasional inspection of the pump head to check for any fluid leakage. The following components should be inspected, cleaned and or replaced as required. See the parts illustration in this manual for further reference.

- · Check valve assembly
- Diaphragm
- Cam drive bearing
- Motor brushes

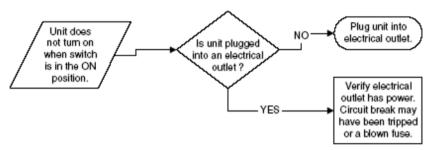
The pump motor brushes should be inspected for motor brush wear every 6 months for heavy usage and 12 months for normal usage.

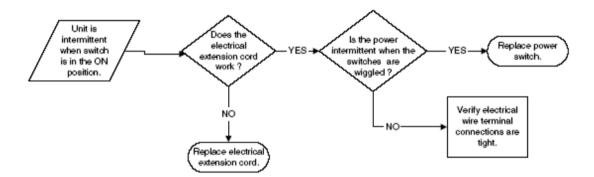
In the event of a reduction in operating pressure, leakage or pump failure refer to the "Fault Finding Guide" And contact your Prochem distributor.

## WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power before servicing.

#### Troubleshooting Chart for Electrical System:

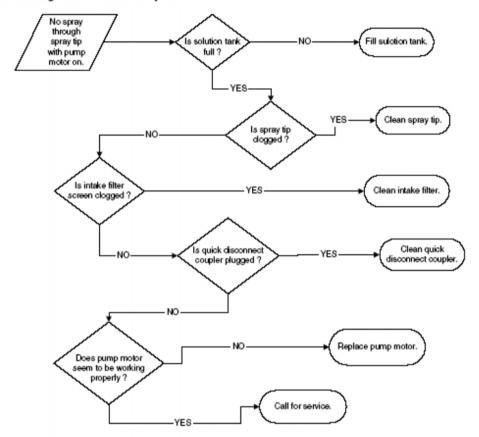




#### WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power before servicing.

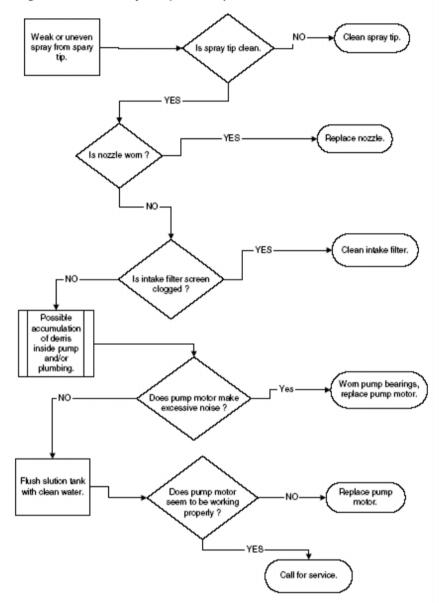
#### Troubleshooting Chart for Solution System:



#### WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power before servicing.

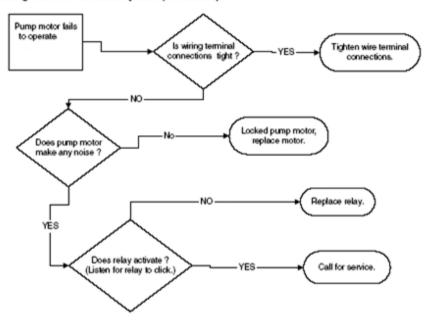
#### Troubleshooting Chart for Solution System (Continued):



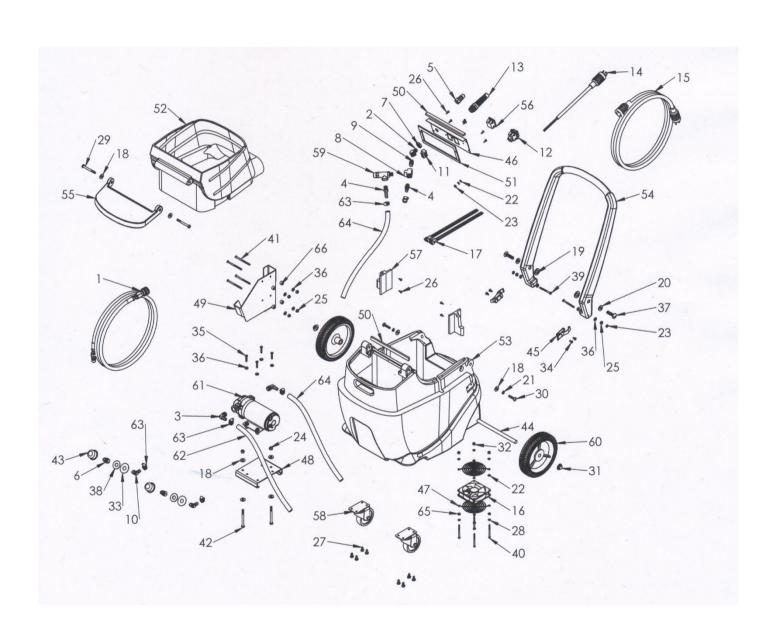
# WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power before servicing.

Troubleshooting Chart for Solution System (Continued):



# M500 MICRO-MIST PARTS DIAGRAM



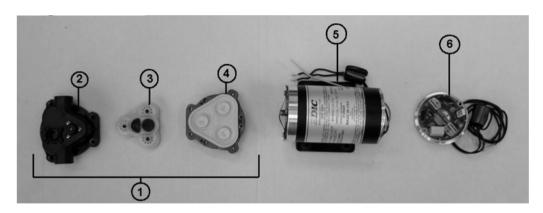
# M500 MICRO-MIST PARTS LIST

REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	E5001	00604-25HPA	SOLUTION HOSE 25FT	1
2	E00053	A00053	45 DEGREE ELBOW, .25" MP X .25" MP	1
3	E00054	A00054	90 DEGREE ELBOW, 3/8 MP X 3/8 B	2
4		A00060	BARB, .375" X .25" MPT, BRASS	2
5	GU00102	A00102	QUICK DISCONNECT ¼ F X ¼ F	1
6	CH00121	A00121	.25 MP X .25 FP ADAPTOR BRASS	2
7	E00124	A00124	LOCKNUT, .25 MPT BRASS	1
8	E00161	A00161	TEE, .25" FP X .25" FP X .25" FP	1
9	CH00111	A12960	NIPPLE, HEX, .25" X .25", BRASS	1
10		A14136	45 DEGREE ELBOW, 3/8" MPT X 1/4" B	2
11	E02190	B02190	TERMINAL BLOCK, 3 - POLE	1
12	E02211-1	B02211-1	ROCKER SWITCH GREEN ILLUMINATED	1
13		B11606	STRAIN RELIEF, PIGTAIL	1
14/15	BE4901A	BE4901A	POWER CORD	1
16		B13280	COOLING FAN	1
17		B14794	WIRING HARNESS 500M	1
18	E00233	C00233	FLAT WASHER, USS, SAE, .25" ID	8
19	E00240	C00240	SHOULDER WASHER, NYLON	2
20		C00252	WASHER, 3/8 X 13/16	2
21	JE00233	C00254	1/4" SPLIT LOCKWASHER	2
22		C00256	LOCKWASHER, #10, EXT. STAR	3
23	E00264	C00264	HEX NUT, 10-32, SS	3
24	JE00273	C00273	1/4 - 20 NYLON – INSERT LOCKNUT	2
25		C00278	LOCKNUT, 10-32, NYLON, SS	6
26	E00293	C00293	#8-32 X 0.5" PAN HEAD SCREW	10
27		C00313-1	HEX BOLT, 1/4-20 X1/2 SS	8
28	E02231	C02231	#8 WASHER, SAE, SS	8
29		C00291	SCREW, 1/4-20 X 2 1/2" LONG, HEX	2
30	E02294	C02294	SCREW, 1/4-20 X 1 1/4, SS	2
31	E02305	C02305	CAP NUT, ½" PUSH-ON	2
32	E02320	C02320	#8-32 NYLON LOCKNUT SS	4
33	JE00255	C11244	WASHER, 9/16" ID X 1.5" OD	2
34	E11529	C11529	SCREW, 10-32 X .375", PH, BO	4
35		C11954	SCREW, 10-32 X 1", PH SS	4
36		C11955	WASHER, #10	12
37	E12013	C12013	SCREW, 3/8-16 X 1 1/2" LONG, TRUSS	2
38		C13024	WASHER, ½" ID, SS	2
39		C13134	SCREW, 10-32 X 2 1/4" LONG, PH, ZP	2
40		C13434	8-32 X 2 1/4 SHCS, SS	4
41		C14792	SCREW, 10-32 X 3", FH SS	4
42		C14793	SCREW, 1/4-20 X 3", HEX CAP	2
43	EH00373	D00373	FILTER, INLET	1
44		D00418-1	AXLE	1
45	E11692	D11692	LATCH	2
46		D11974	SWITCH PLATE	1
47		D13281	FAN GUARD 92mm	2
48		D14777	PUMP PLATE	1
49		D14784	SPRAY GUN HOLDER	1
50		E11129	GASKET	2

	STOCK CODE	PART NO.	DESCRIPTION	QTY
51		E12060	GASKET, SWITCH PLATE	1
52		F11967-2	STORAGE BIN	1
53	E11968	F11968	SOLUTION TANK / MOTOR HOUSING	1
54	E11969	F11969	HANDLE	1
55	E11491	F11971	LID, SOLUTION TANK	1
56	E12118	F12118	HOLE COVER, SWITCH	1
57		F12943/4	BRACKET, LEFT/RIGHT	2
58		G00531	CASTER, 3" SWIVEL	2
59		G11314-4	PRESSURE RELIEF, 200PSI	1
60		G11765	WHEEL 7"	2
61		G14776	PUMP 220PSI	1
62		J00613B	SOL. HOSE, 3/8"	1
63		J00651	HOSE CLAMP, .25" TO .625"	6
64	E11154	J11154	SOL. HOSE, 3/8" 100PSI WIRE	2
65		K00685	#8 SPACER	4
66		K00727	SPACER, .5 OD X.257 ID X .3 H	4

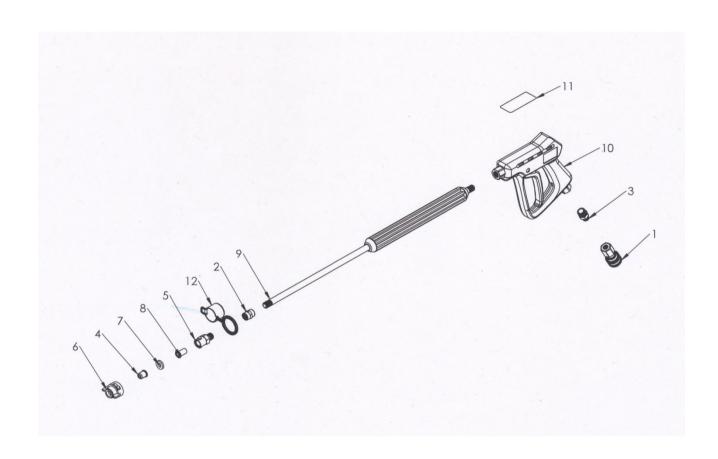
# **PUMP PARTS LIST**

### E13639-2 250 PSI Pump



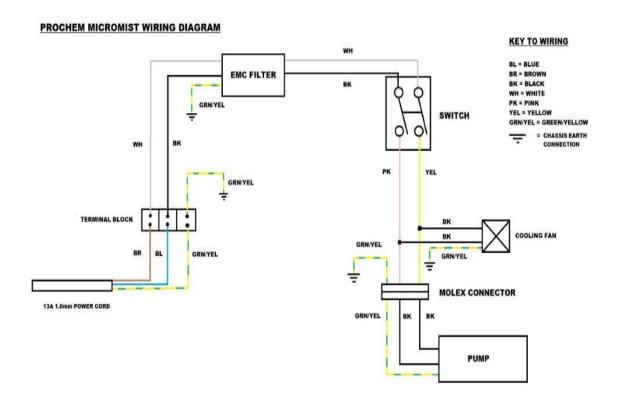
REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	E13639-2-PHA	G13639-2-PHA	250 PSI PUMP HEAD ASSEMBLY	1
2	E11764UHA	G11764-1-UHA	UPPER HOUSING(FOR E11162)	1
3	E13639-2-VHA	G13639-2-VHA	VALVE REPAIR KIT	1
4			DIAPHRAGM AND DRIVE BEARING ASSY.	1
5			MOTOR 230V AC	1
6	E13639-2-EBK	G13639-2-EBK	CARBON BRUSH KIT	1

# MISTING GUN PARTS LIST AC9000-2



REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	GU00102	A00102	QUICK DISCONNECT, .25" F, .25" FP, BRASS	1
2	E12964	A12964	COUPLER, .25", BRASS	1
3		A13775	HEX NIPPLE, .375" X .250	1
4		A14779	ATOMIZING TIP, TN2	1
5		A14780	QUICK CHANGE BODY	1
6		A14781	QUICK CHANGE CAP (PART OF KIT TO INCLUDE ITEM 7)	1
7		A14781	GASKET, QUICK CHANGE TIP (PART OF KIT TO INCLUDE ITEM 6)	1
8		A14783	CHECK VALVEW/100 MESH, 10LB	1
9		G09024	LANCE INSULATED, 24"	1
10		G13298	SPRAY GUN, HIGH PRESSURE	1
11		H14778	LABEL, WARNING, MIST GUN	1
12		K14786	CAP, SPRAY GUN	1

# **WIRING DIAGRAM**



# **DECLARATION OF CONFORMITY**

We:

Prochem Europe Ltd.,
Oakcroft Road,
Chessington,
Surrey, KT9 1RH
UK
(Importer / EC Responsible Person)

E.D.I.C 1753, Blake Avenue, Los Angeles, California, 90031-1006 USA (Manufacturer)

Declare that the product(s):

Type(s): MICRO-MIST

Model(s): **M500** 

Description: SURFACE DISINFECTING SYSYEM 220 - 240V 50 Hz

Has been manufactured in conformity with the following standards and specifications:

BS EN 60335-1 EN 55014-1 EN 55014-2 BS EN 61000-3-2 BS EN 61000-3-3 BS EN 50366

And comply with the requirements of (as amended):

2006/95/EC Low Voltage (LVD) Directive

2004/108/EC Electromagnetic Compatibility (EMC) Directive

A Technical file is held by Prochem Europe Ltd.

Certificate of compliance and test reports have been issued by:

Prochem Europe Ltd Oakcroft Road Chessington Surrey KT9 2NQ

Signed

(For and on behalf of the Importer / EC Responsible Person)

Name: J Hattersley

Position: Equipment Product Manager

Place of Issue: Chessington UK

Date of Issue: 06/20