

Installation and operation

The hand pump consists of stainless steel and PTFE seals.

Safety regulations

- observe all warnings and safety regulations. When filling flammable liquids, be sure to comply with the "Technical Regulations for Flammable Liquids" and safety tips from the reagent manufacturer (safety specifications sheet)
- when filling dangerous liquids, you absolutely must wear protective clothing (protective glasses, gloves, apron and possibly boots)
- every user must know the contents of these operating instructions and have them handy at all times
- use the equipment within the framework of the material stability. The pump is made of V4A steel, material 1.4571 (SS 316Ti) and PTFE
- only fill media emitting gases and smoking media in well ventilated areas. Also refer to the safety tips from the reagent manufacturer (safety specifications sheet)
- only use the equipment in such a way that neither the operator nor other persons are endangered
- never use force when operating the equipment

Important: When filling slightly flammable liquids take precautions for removing electrostatic charges. Use the Anti-static set (Order-No. 9003), see page 3.

Operation, precautionary measures, application limitations

These pumps serve to fill highly fluid to oily liquids from canisters and barrels up to approx. 220 litres. The stainless steel model in connection with the anti-static set is suitable for filling flammable liquids. Use the PP polypropylene model for acids and caustic solutions.

Always hold containers to be filled away from your body and wear protective clothing. Do not extend the discharge tube with a hose. Make sure that the discharge arc is fastened tightly to the pump.

The user has to check whether the equipment is appropriate for his application.



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Packaging/contents

Please check the contents to make sure everything is included and for possible transport damages.

Point out any external, obvious damages on the packaging to the deliver/shipper and have him confirm them in writing.

The pump consists of different pieces:

1. Hand pump with male thread 5/4" at discharge connection.
2. Discharge arc or hose connection and if necessary bonding ground set.

Parts coming into contact with media

Stainless steel, material 1.4571 (316Ti) and gaskets made of PTFE.

Cleaning and maintenance

Make sure that no coarse dirt particles are in the liquids. Dirt can destroy the pump valves and guides. Rinse the pump using appropriate media at regular intervals!

Warning: Avoid injuries due to dangerous fluids. Equipment parts might be filled with reagents. Never direct openings at a person's body.

Wear protective goggles, gloves and apron.

Malfunctions - What can I do?

- liquid is not filled: bottom valve is soiled
- if only a little liquid remains in the container, you must pump correspondingly longer
- no modifications or repair attempts should be carried out on the hand pump, since otherwise the warranty rights are extinguished



Transferring of flammables or use in hazardous duty environments

Bonding is an electrical connection between a primary metal vessel and a metal receiving vessel. See schematic.

Grounding is an electrical connection between a metal vessel, pump, motor and a constant ground; i.e. a metal rod driven into the earth.

Bonding and grounding are required when pumping flammable materials or in hazardous duty environments. Failure to bond and ground properly can cause a discharge of static electricity Resulting in fire, injury or death.

Please always take care of the official safety authority regulation. If in doubt, do not start pump! Be sure bonding and grounding wires are secure before starting operation.

(Ground and bond wires must have less than one ohm resistance for safe usage. Check continuity before starting.) Always check with a safety engineer when any question arises and periodically check safety procedures with a safety engineer.

