



PLEASE READ AND UNDERSTAND THIS MANUAL BEFORE USING

Leak Sealing Bags M1, M2, and Mini Leak Sealing Bags INSTRUCTIONS FOR USE

NON-COMPLIANCE WITH INSTRUCTIONS AND WARNINGS FOR SAFE OPERATION CAN
DAMAGE PRODUCTS, PROPERTY AND CAUSE SERIOUS BODILY INJURIES.

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For sizing, pricing, and technical information see

www.savatrade.com



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Leak Sealing Bags M1, M2, and Mini Leak Sealing Bags

INSTRUCTIONS

1. The M1 and M2 sealing bags are used for sealing leaks or cracks in pipes, tanks and various containers with a diameter larger than 20 in. (48 cm). For smaller diameters use Sava Mini Leak Sealing Bags.
2. Always wear protective clothing and equipment.
3. Know what materials your particular equipment is made from. Know what chemicals can damage them. Some chemicals can damage them over extended time. Determinations can be made whether or not they are suitable for temporary use. Most Sava Sealing bags are made of NR/BR (natural Isoprene/butadiene rubber) soft rubber. Sava Sealing plates are made of petroleum resistant neoprene rubber. Custom bags can be made out of other types of rubber compounds for use with normally incompatible chemicals.
4. Before (and after) use clean and check the sealing bag and accessories for possible damage and debris. Degradation can appear as hardening of the rubber, softening, cracks or blisters on rubber. Chemical degradation anticipation can be determined using ISO technical Report 7620 (rubber Materials – Chemical resistance).
5. Light colored dust can form on rubber during storage. It should be cleaned with a damp cloth before use (it is not hazardous). It is part of the manufacturing process and naturally precipitates out of the rubber during storage. It is not a sign of chemical reaction, damage or degradation.
6. Always place the sealing bag with its smooth surface towards the surface of the tank. If petroleum based liquids is present, underlay a neoprene sealing plate.
7. Always clean the contact surface on which the sealing bag is to be placed.
8. Always use accurate pressure gauges.
9. Never exceed the maximum sealing bag inflation pressure (1.5 bar/22 PSI).
10. Always use fixing belts. The belts are to be properly pulled through the openings on the sealing bag.
11. Always use an inflation hose, which is long enough to inflate the bag from the safe distance.
10. Stay clear of the danger zone where the sealing bag is used.
11. Clean the sealing bag with a mild detergent and water. Never use aggressive substances and sharp objects for dirt removal. Leave the sealing bag to air-dry without using any additional heating sources.
12. Store the sealing bag in a dry and dark place, so that the filler valve is visible and protected from damage.
13. For long-term storage (months) it is recommended to store rubber items in a closed cardboard box or other similar package to protect it from free air circulation. This will minimize ozone degradation of the rubber; and extend the life of the equipment. It should not be hermetically sealed so as to cause mold.

Large leak sealing bags

Use M1 Leak Sealing Bags for quick and efficient sealing of barrels, pipes and tankers from 20in. to 9.8ft. diameter (63in. to 31ft. circumference). Use M2 Leak Sealing Bags for quick and efficient sealing of barrels, pipes and tankers from 20 in. to 8ft. diameter (63" to 40ft circumference). Use Sava [Mini Leak Sealing Bags](#) for smaller diameters. Sealing bags are made of NR/BR (natural Isoprene/butadiene rubber) soft rubber. Sealing plates are made of petroleum resistant neoprene rubber. Special reinforcing cord structure assures greater flexibility and optimum performance. Equipped with standard 1/4" pneumatic quick-connect couplings.

- M1 sealing bag has two openings on each side for pulling straps (included in kit).
- M2 sealing bag uses swivel eyelet bolts (included in kit).

M1

20in. to 9.8ft. diameter (63in. to 31ft. circumference)



M1 Kit includes:

- 1 NR/BR (natural Isoprene/butadiene rubber) type M1 leak sealing bag
- 1 foot pump with safety valve
- 4 tensioning belts 32.8' - yellow - orange
- 1 CR (chloroprene rubber) sealing plate 39" X 11" X 1"
- 2 CR (chloroprene rubber) sealing plates 23" X 11" X 1"
- 1 inflation hose - 32'

Bags can be purchased separately or as a complete kit.

M2

19 in. to 8ft. diameter (5' to 40ft circumference)



[SHOW METRIC SIZE](#)

M2 Kit includes:

- 1 NR/BR (natural Isoprene/butadiene rubber) type M2 leak sealing bag
- 1 foot pump with safety valve
- 2 ratchet belts yellow - orange 6.6'
- 2 tensioning belts 32.8' - yellow - orange
- 1 CR (chloroprene rubber) sealing plate 39" X 11" X 1"
- 2 CR (chloroprene rubber) sealing plates 23" X 11" X 1"
- 1 inflation hose - 32'



Technical Data - large leak sealing bags

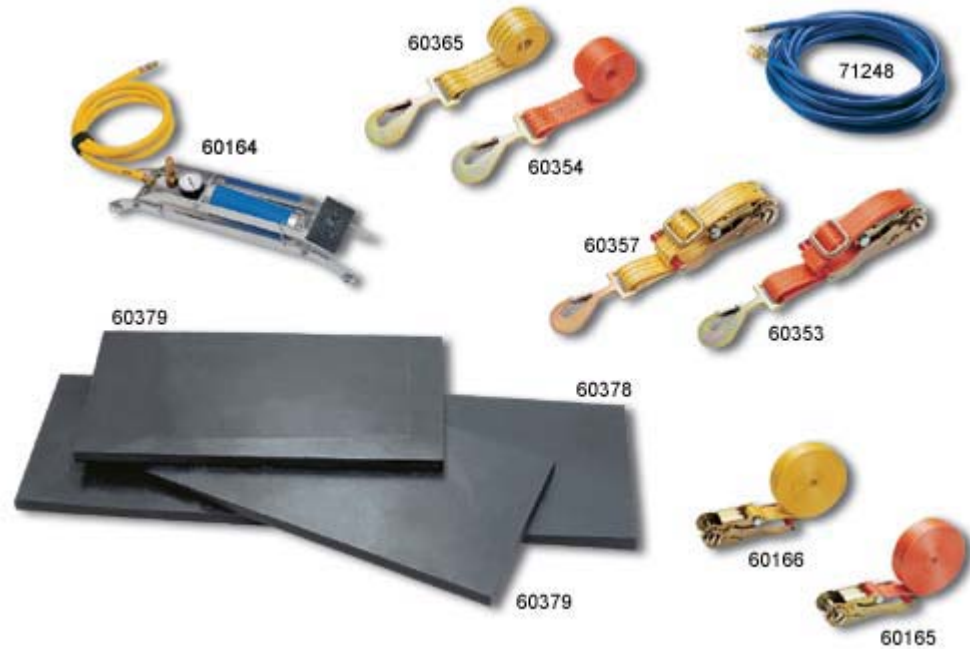
Type SHOW METRIC DATA	M1	M2
Item #	60043	60350
Dimensions	24.4" X 11.8" X .8"	24.4" X 11.8" X .8"
Sealing surface	17.7" X 9.2"	17.7" X 9.2"
Max. inflation pres.	21.6 PSI	21.6 PSI
Sealing pressure	20.2 PSI	20.2 PSI
Volume	5.28 GAL	5.28 GAL
Weight	10.58 lbs	13.67 lbs

Metric equivalents can be found at www.savatrade.com

Large leak sealing bags accessories

M1 Accessories

M2 Accessories



M1 Accessories

Item #	Description	Weight
60164	Foot-operated pump with pressure gauge - 0-86 PSI	5.5 lbs
71248	32' blue inflation hose with standard 1/4" quick-connect coupling	2.6 lbs
60166	Ratcheting tensioning and extension belt - 32' yellow	4.4 lbs
60165	Ratcheting tensioning and extension belt - 32' orange (2 count)	4.4 lbs
60379	CR (chloroprene rubber) sealing plate - 23" X 11" X 1" (2 count)	14.3 lbs
60378	CR (chloroprene rubber) sealing plate - 39" X 11" X 1" (1 count)	23.8 lbs

M2 Accessories

Item #	Description	Weight
60164	Foot-operated pump with pressure gauge - 0-86 PSI	5.5 lbs
71248	32' blue inflation hose with standard 1/4" quick-connect coupling	2.6 lbs
60353	Ratchet belt 6' orange	3.3 lbs
60357	Ratchet belt 6' yellow	3.3 lbs
60354	Adjustable fastening belt - 16' orange	1.7 lbs
60365	Adjustable fastening belt - 16' yellow	1.7 lbs
60166	Ratcheting tensioning and extension belt - 32' yellow	4.4 lbs
60165	Ratcheting tensioning and extension belt - 32' orange (2 count)	4.4 lbs
60379	CR (chloroprene rubber) sealing plate - 23" X 11" X 1" (2 count)	14.33 lbs
60378	CR (chloroprene rubber) sealing plate - 39" X 11" X 1"	23.8 lbs

High pressure cylinders and pressure regulators

Every time the pressure regulator is attached to a high-pressure cylinder the following safety and operating precautions must be used. Deviation from the following safety and operating instructions may result in fire, explosion, damage to the regulator or injury to the operator.

High-pressure cylinder care

1. Before removing the protective cap, secure the cylinder to a wall, post or cart to prevent it from falling.
2. Inspect the cylinder valve for damaged threads, dirt, dust, oil or grease. Remove contamination with a clean cloth.
3. Crack open the cylinder valve for an instant to blow out dust and foreign matter that could clog or damage the regulator. Do not place any part of your body near the airflow, as high-pressure air-jets-even at relatively low velocity-have been known to tip the cylinder over, accelerate projectiles, penetrate skin, dislocate eyeballs and cause other serious injury.
4. Inspect regulator and clean if foreign matter is present.
5. Turn the regulator adjusting handle counter-clockwise until the adjusting spring pressure is released (off position) then install the regulator onto the cylinder valve. Do not use grease, Teflon tape or sealants, as the compression fitting is self-sealing. Tighten compression nut with a wrench using firm pressure (excessive force is not necessary and can damage threads).
6. Stand away from the regulator behind the tank before opening the high-pressure valve on the cylinder. Keep the cylinder between you and the regulator when opening the valve.
7. **Carefully and slowly**, slightly crack open the high-pressure valve on the cylinder turning counter-clockwise. Check for leaks.
8. **To check for leaks**, open the low-pressure regulator-adjusting handle one turn clockwise (pressure should be indicated on the low pressure gauge). Then close the high-pressure cylinder valve.
9. If the high pressure gauge reading drops then there is a leak in cylinder valve, inlet fitting or high pressure gauge. If the low pressure gauge reading drops then there is a leak in the output fitting. If there are no leaks present close the low-pressure regulator-adjusting handle and connect the output hose, controller(s), and lifting apparatus.
10. Open high-pressure valve only if leaks or malfunctions are not present. Open valve completely (to the valve stop) to seal the valve packing.
11. Test entire apparatus before actual use to determine proper operation and sealing of connections and apparatus.