

Stationary Leak Tester

EXAMPLE USER MANUAL



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Warning

This manual should be used in accordance with the national legislations. It should be considered as a component of the machine and should, as prescribed in the current legislations, be kept for consultation until the final dismantling.

This manual should be kept at a safe place by its owner. It should always be available for consultation

When, in case of damage, a new copy of the manual is desired, please contact:

Oxipack BV.
Wilgenkade 17
3992LL Houten
The Netherlands

The text of this manual is written in the English language.

1. INTRODUCTION

The Stationary Leak Tester is an apparatus for leak detection in soft packs and is only to be used for that purpose.

Always unplug the Stationary Leak Tester from the main power supply when maintenance or cleaning takes place.



The Stationary Leak Tester operates on electricity so there is a risk of electric contact.

Take the safety measures that are mentioned below before using the Stationary Leak Tester:



Attention

Be sure that the following regulations are met, before connecting to the main power- and air supply.
 The main supply applies to the local regulations.
 The main supply has an earth leakage protection.
 Check the supply voltage and state of the plug before connecting.
 Ensure the Stationary Leak Tester is positioned stable on a flat horizontal surface.
 The machine is a heavy object, and this should be taken in account when placing or moving the machine.

The customer takes care of a correct connection for the energy and compressed air supply. This differs per leak tester, so the fields are blank in this example manual. A personalized manual is delivered with every leak tester, please consult that for specific details.

Weight		kg
Power supply		VAC kW
Compressed air		bar
Air consumption		NI/min

The noise level has been measured according to the machine directive. The A-weighted sound level is measured in the workplace during normal working conditions. The measurement was conducted at a distance of 1 meter from the machine surface and at a height of 1.60 meter above the ground. The level of the A-weighted equivalent continuous sound pressure (L_{Aeq}) is below the 70 dB(A).

The Stationary Leak Tester may only be opened by Oxipack staff! Inside are electrical contacts.

The Stationary Leak Tester is a sensitive device for measuring purposes. To maintain its function and accuracy it should be kept clean - especially from dust and moist or liquids. Maintenance information is available in chapter 4.

2. OPERATING INSTRUCTIONS

2.1 Standard Operating Procedure

Step 1: Connect to compressed air supply (6 bar, 8mm air pressure tube), connect to power supply, and turn on switch if applicable. The power switch is located at the rear end of the leak tester, next to the power cord connection.

All steps for the operator to follow are visualized in text on the display.

Step 2: Open lid and place package.

Step 3: Close the lid and press start button (green). The measurement will start, and the result will appear on the display.

If needed the measurement can be aborted by pressing the red button.

Advice 1

Before each shift perform the following steps:

Step 1: Open lid, make sure chamber is empty.

Step 2: Close the lid and press start button (green)

The measurement will start, and the result Pack OK will appear on the display, if not see Chapter 4 Maintenance

Advice 2

A dummy measurement can be performed on a frequent basis:

Step 1: Open lid, place dummy package in the chamber, see chapter 2.2 for explanation.

Step 2: Close the lid and press start button (green).

The measurement will start and the result **Pack Leak mbar** will appear on the display, if not check Chapter 4 Maintenance & Service

If the machine is not used, keep the lid closed to prevent pollution.

In order to perform a reference measurement or check measurement, perform an empty chamber test and (see advice 2), or a dummy test (chapter 2.2).

2.2 Dummy usage

If a dummy package with a controlled leak is provided, this can be used to control the leak tester (not for validation purposes).

The dummy consists of an aluminum or PVC case including a stainless-steel insert. This insert can be ordered in a calibrated leak size as a reference, which is easy to exchange (See How to replace dummy leakage.pdf) A special tool for replacing the insert is delivered with the dummy.

When the dummy is being used, the Oxipack Stationary Leak Tester gives leakage information with an accepted tolerance each time you do a test. With this result you can prove the leak tester is working correctly.

Dummy measurements must have a test interval time of at least 1 minute.
A value deviation of +/- 3 mbar compared to the test certificate is acceptable.

2.3 Possible Results

- If a pack is ok (**green light on**) remove pack/packs.
- If a pack has an error (**red light on**) remove pack/packs, if needed measure again (by repeating step 3 of the Standard Operating Procedure in step 2.1).
- If **error 203** appears, remove pack, and try to measure again by repeating step 3 of the Standard Operating Procedure in 2.1. If the same error occurs, please contact Oxipack support (see [chapter 4. Maintenance](#)).
- Testing with an empty chamber should result in **Pack Ok**. If not, please contact Oxipack support before exchanging membranes and / or O-ring.

2.4 Messages

- **Pack Ok**

The result of the measurement is positive, no leak found.

- **Pack leak <value> mbar (error message in logfile -xx)**

The result of the measurement is above a set value.

Cause:

1. Leak in pack or
2. Membrane has a leak

- **Error message 201/202**

The pressure during vacuuming of the measurement space does not reach a set value within a set time.

Cause:

1. Pack leak / Big hole or
2. Membrane has a leak

- **Big leak (error message in logfile 101 or error 102)**

The measurement is checked and is above a set value.

Cause:

1. Big hole in the pack or
2. Membrane has a leak

- **Error 203**

Main valve did not function properly.

→Contact Oxipack support (see [chapter 5. SUPPORT](#))

- **Sensor error**

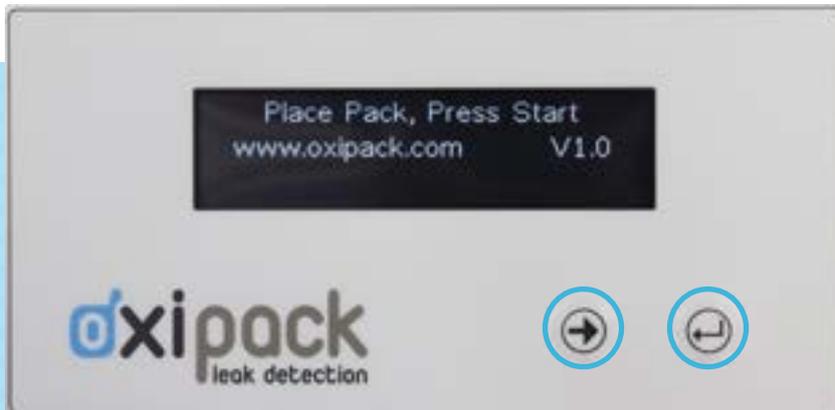
Sensor has no signal.

→Contact Oxipack support (see [chapter 5. SUPPORT](#))

- **Air pressure below 4 bar**

Please verify incoming pressure and follow instructions on the display. Once the feed pressure reached the correct value, instructions will appear.

3. DISPLAY MENU



The display of the leak tester features a built-in menu. To access this menu, both “**buttons**” must be pressed simultaneously.

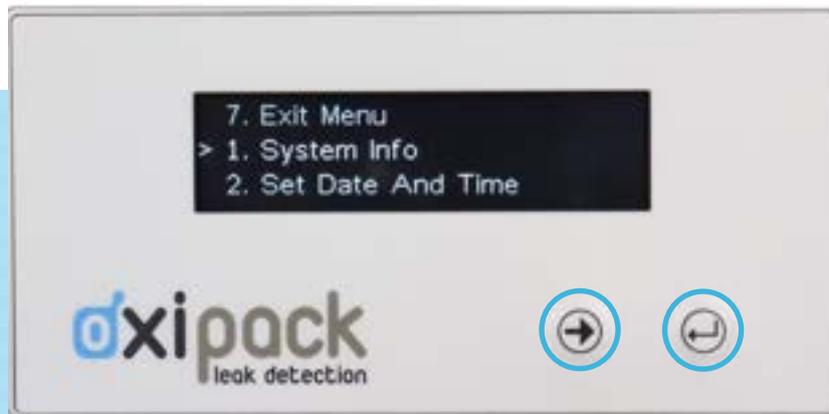


This key can be used to scroll through the menu and to scroll through settings.



This key can be used to confirm the selection.

3.1 Menu options



The menu features the following options:

1. System Info → (See chapter 3.1.1),
2. Set Date and Time → (See chapter 3.1.2),
3. Configure Network → (See chapter 3.1.3),
4. Export Log → (See chapter 3.1.4),
5. Import Update → (See chapter 3.1.5),
6. Reboot → (See chapter 3.1.6),
7. Exit Menu → (See chapter 3.1.7).

3.1.1 System Info

On the System info page, the current Recipe version, Date, Time, IP, and Controller version are shown. Oxipack could ask for this information when support is needed.

3.1.2 Set date and time

At “Set Time” the time and date could be set.



This key can be used to scroll through the date and time and set the parameter to the right value.



When this key is being pressed you will be able to switch from “Month” to “Day”, “Hour” and “Minute”. When pressed again after “minute” is being shown the selection will be confirmed.

3.1.3 Configure Network

At “Configure Network” the IP address of the controller can be set. You are also able to change the subnet and gateway IP on this page.



This key can be used to scroll through the values (1-255) and set the parameter to the right value.



When this key is being pressed you can switch from the first to the second and third address. When pressed again the selection will be confirmed.

3.1.4 Export Log

At “Export Log” you can transfer measured data to a connected thumb drive. You can choose between exporting data from the last Day, Week, Month, and Year.



This key can be used to scroll through the menu to select the right export amount.



When this key is being pressed you confirm the selection.

The machine has the capacity to save 365 days of data. It will re-write automatically.

3.1.5 Import update

At “Import Update” you will be able to import new settings or an update. Connect the USB to the leak tester and select “Import Update”, a pop up will appear select “Yes” to start the update and “No” to abort the update.



This key can be used to scroll through “Yes” and “No”.



When this key is being pressed you confirm the selection.

3.1.6 Reboot

At “Reboot” you will be able to reboot the controller within the leak tester. When selected a pop up will appear select “Yes” to confirm the reboot and “No” to abort the process.



This key can be used to scroll through “Yes” and “No”.



When this key is being pressed you confirm the selection.

3.1.7 Exit Menu

Select “Exit Menu” to exit the menu.



When this key is being pressed you confirm the selection.

3.2 Request update

In case parameters need to be changed, contact Oxipack support. They will send you a replacement file (See chapter 3.1.5). Contact Oxipack Support at:

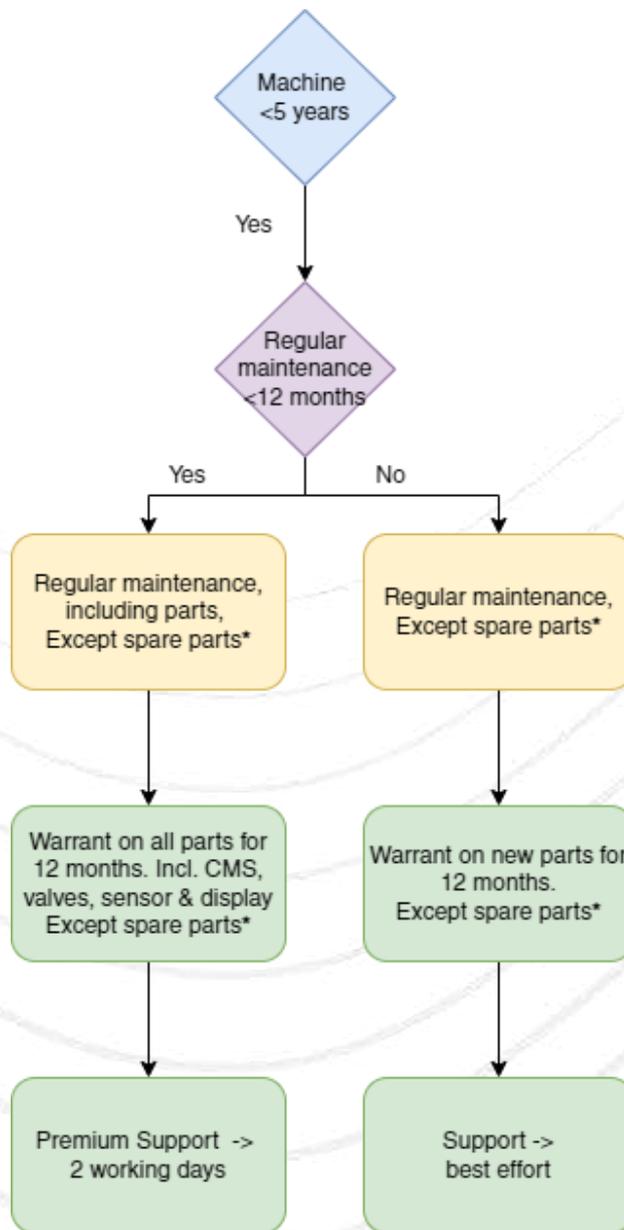
E-mail support@oxipack.com

Phone +31 88 6957 290

4. MAINTENANCE & SERVICE

The Stationary Leak Tester is a sensitive device for measuring purposes. To maintain its function and accuracy it should be kept clean - especially from dust and moist. The closing surface which contains the O-ring should be kept clean. This can be done with alcohol wipes. For chemical resistance of Oxipack Membrane & O-Ring check chapter 11.

For spare parts (also check chapter 12), maintenance requests, quotes and/or upgrades you can contact service@oxipack.com



*: Warranty excluding membrane, closing ring

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5. SUPPORT

When a problem with the SLT machine occurs, please visit [MyOxipack](#). In the Troubleshooting tile, under the tab 'Solving a problem, you will find the frequently occurring problems. Search for the problem the machine has and follow the questions and actions that will lead you to the identification of the root cause, and solution for the problem.

However, if someone made changes to the machine before reading the instruction, please contact Oxipack support right away! That could be the cause for the problem or it could cause the provided solutions to become ineffective. If the problem is not in the list, please also contact Oxipack support.

E-mail support@oxipack.com

Phone +31 88 6957 290

6. TRANSPORT AND STORAGE

The Stationary Leak Tester is a sensitive device that should be transported and stored carefully.

6.1 Safety regulations

- Never lift loads over people
- Always move the machine as carefully as possible
- Transport as carefully as possible to avoid damage to the machine during Transport.
- Avoid mechanical shocks
- For overseas transport, the machine must be tightly packed and protected against corrosion (i.e., with a desiccant)
- The wooden box in which the machine was delivered can be kept for reuse, (temporary) storage or for returning the machine in case of maintenance or repair

6.2 Transport

- The machine can be transported by forklift, lift truck, or by persons
- Always transport the device upright, if possible, on a pallet
- Do not tilt or turn the device
- Do not place heavy products on the machine

6.3 Storage

Only store under the following conditions:

- Do not store in the open air
- Keep dry and dust-free
- Do not expose to aggressive substances
- Shield from sunlight
- Avoid mechanical shocks
- Storage temperature: -10 to 50 °C
- Max. humidity: 60%
- Avoid large temperature fluctuations (condensation water formation)
- During long-term storage (> 3 months) regularly check the general condition of all parts and the packaging. Renew packaging if necessary.
- When stored in damp rooms, the machine must be packed tightly and protected against corrosion (desiccant).

7. WARRANTY CONDITIONS

Standard at all our new Stationary Leak Testers we offer a warranty of 1 year.

All our deliveries have our terms and conditions which can be found on our website (<https://oxipack.com/legal/>).

EC DECLARATION OF CONFORMITY

(Annex II 1 A of EC Machinery Directive 2006/42/EC)

We,
Oxipack
Wilgenkade 17
3992 LL Houten
The Netherlands

Herewith declare, on our own responsibility, that the machinery:

Stationary Leak Tester

which this declaration refers to,
is in conformity with of the following standards:

**EN-ISO 12100-1, EN-ISO 12100-2,
EN 60204-1,**

and is in accordance with the conditions of the following Directives:

Machinery Directive 2006/42/EC

That the following natural or legal person established in the Community is mandated in writing to perform all or part of the obligations and formalities connected with the Machinery Directive and that the following natural or legal person established in the Community is authorized to compile the technical file:

Oxipack
P. Jobse
Wilgenkade 17
3992 LL Houten
The Netherlands

THE NETHERLANDS, Houten, January, 2023 *A. T. Smit,*

9. EXAMPLE PAT TEST CERTIFICATE

Conducted by: Oxipack B.V.
Location: Houten - The Netherlands
Department: Support

The below mentioned equipment is tested to BS EN50110 / NEN3140, with the result also indicated as found at the time of testing.

Object & Test details

Item Number:		Tested by:	Oxipack
Description	Leak Tester	Test device:	EazyPAT 3140 USB
Brand:	Oxipack	Serial number Tester:	
Type:	SLT	Test date:	
Serial number:		Validity periode:	12 months

Test	Result	Unit	Status
Visual Control			
Resistance line protection		Ohms	
Isolation resistance		MOhms	
Substitute leakage current.		mA	

Comments:

Endresult:

Signature:

Oxipack BV
Wilgenkade 17
3992 LL Houten

Print date:

10. EXAMPLE PRESSURE SENSOR



5-Points-Measurement Report

Company:

OC Number:

Specification of the device:				
Manufacturer:	Start signal output:	0,00	Lower range:	0,00
Serial number:	End signal output:		Upper range:	1,00
Type:	Unit signal output:	V	Unit range:	bar
Ordering code:			Pressure:	absolute

Specification of the calibration equipment:			
Ambient temperature	23,0 °C	Medium:	Nitrogen
Pressure reference:	Manufacturer: GE Druck	Type:	CM 2-B
	Accuracy: -1...2 bar ± 0,006%RDG+0,006%FS+0,01%RDG+2,50 Pa	Serial number:	4334700 (4305470, 4255851)
Multimeter:	Manufacturer: Agilent	Type:	34401 A
		Serial number:	MY47003478

Measured values:						
Input	Input	Output target	Output values actual			
			measured V	deviation %FSO	measured V	deviation %FSO
In %	bar	V	rising	rising	falling	falling
1,0	0,010	0,100				
25,0	0,250	2,500				
50,0	0,500	5,000				
75,0	0,750	7,500				
100,0	1,000	10,000				

Evaluation according to IEC 60778

Target 8,50 Actual

Measured and logged by:

Date:



11. EXAMPLE MICRO CALIBRATION SHEET

Calibration Sheet					
Supplier:		Oxipack			
Type:		SLT			
Recipe settings used					
Measurement Time 1		sec			
Measurement Time 2		sec			
Leakvalue		mbar			
Serial number:			Calibration date:		
Vacuum Pressure:			Gas:		
mbar			Air		
Flow Rate:			Act. pressure		
act ccm			mbar		
MC valve	closed	open			
Measurement	Software V1.0.1.3	Software V1.0.1.3			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Avg Delta in mbar					
STDev					
Result:					
Used measurement equipment					
Furness Controls					
FCO210, model 1 ± 20.00 ml/min					
Serial No:					
Calibration date Microcalibrator:					
Checked by:					
Signature:					
					
<small>Oxipack B.V. Wilgenkade 17 3992 LL Houten +31 (0) 88 695 7290 support@oxipack.com KVK 63666006 BTW NL855343096B01 Bank: ING IBAN: NL77INGB0007143848 BIC/Swift: INGBNL2A</small>					

12. CHEMICAL RESISTANCE MEMBRANE

Chemical Resistance of Oxipack Membrane & O-Ring

1	Acetaldehyde	R	73	Ethyl bromide	R	145	Oils vegetable	T
2	Acetates (low mol wt)	R	74	Ethyl chloride	R	146	Oleic acid	R
3	Acetic acid (less than)	R	75	Ethylamine	R	147	Oxalic acid	R
4	Acetic acid (more than)	R	76	Ethylene chlorohydrin	R	148	Oxygen (gas)	R
5	Acetic anhydride	T	77	Ethylene dichloride	R	149	Ozone	R
6	Aceto nitrile	R	78	Ethylene glycol	T	150	Perchloric acid	R
7	Acetone	T	79	Ethylene oxide	R	151	Perchloroethylene	T
8	Acetyl bromide	R	80	Fatty acids	T	152	Phenol	N
9	Acetyl chloride	R	81	Ferric chloride	R	153	Phosphoric acid (ortho)	R
10	Air	R	82	Ferric sulfate	R	154	Phthalic acid	N
11	Alcohols	T	83	Ferrous chloride	R	155	Plating solutions	R
12	Aliphatic hydrocarbons	N	84	Ferrous sulfate	R	156	Polyglycol	T
13	Aluminium chloride	R	85	Fluoborate salts	R	157	Potassium carbonate	R
14	Aluminium sulphate	R	86	Fluoboric acid	R	158	Potassium chlorate	R
15	Alums	R	87	Fluo-silicic acid	R	159	Potassium hydroxide	R
16	Ammonia (gas, liquid)	R	88	Formaldehyde	R	160	Potassium hydroxide	R
17	Ammonium acetate	R	89	Formic acid	R	161	Potassium iodide	R
18	Ammonium carbonate	R	90	Freon	T	162	Propinal Adehyde	R
19	Ammonium chloride	R	91	Gasoline (non-aromatic)	N	163	Pyridine	R
20	Ammonium hydroxide	R	92	Gasoline (high-	N	164	Sea water	R
21	Ammonium nitrate	R	93	Glucose (dextrose)	R	165	Silicone fluids	R
22	Ammonium phosphate	R	94	Glue (water base)	R	166	Silicone oil	R
23	Ammonium sulfate	R	95	Glycerin	T	167	Silver nitrate	R
24	Amyl acetate	N	96	Grease	T	168	Skydrol	N
25	Amyl alcohol	N	97	Hydriodic acid	R	169	Soap solutions	R
26	Amyl chloride	N	98	Hydro bromic acid	R	170	Sodium bicarbonate	R
27	Aniline	T	99	Hydrochloric acid	R	171	Sodium bisulfate	R
28	Aniline hydrochloride	T	100	Hydrochloric acid	R	172	Sodium bisulfite	R
29	Antimony salts	R	101	Hydrochloric acid (conc.)	R	173	Sodium borate	R
30	Aqua regia (75% HC1	R	102	Hydrocyanic acid	R	174	Sodium carbonate	R
31	Aromatic hydrocarbons	N	103	Hydrofluoric acid	R	175	Sodium chlorate	R
32	Arsenic salts	R	104	Hydrogen peroxide (dil.)	R	176	Sodium chloride	R
33	Barium salts	R	105	Hydrogen peroxide	R	177	Sodium ferrocyanide	R
34	Benzaldehyde	N	106	Hydrogen sulfide	T	178	Sodium hydrosulfite	R
35	Benzene	N	107	Hypochlorous acid	R	179	Sodium hydroxide (dil.)	R
36	Benzene sulfonic acid	R	108	Iodine and solutions	T	180	Sodium hydroxide	R
37	Benzoic acid	N	109	Iron salts	R	181	Sodium hydroxide	R
38	Benzyl alcohol	N	110	Isopropanol (IPA)	R	182	Sodium hypochlorite	R
39	Bleaching liquors (non	R	111	Kerosene	N	183	Sodium hypochlorite	R
40	Boric acid	R	112	Ketones (water soluble)	R	184	Sodium nitrate	R
41	Bromine	R	113	Lactic acids	R	185	Sodium silicate	R
42	Brake fluid	R	114	Laquer solvents	N	186	Sodium sulfide	R
43	Butane	N	115	Lactic acids	R	187	Sodium sulfite	R
44	Butyl acetate	N	116	Lead Acetate	R	188	Steam (up to 40 psi)	T
45	Buryl alcohol (Butanol)	T	117	Linseed Oil	N	189	Stearic acid	R
46	Butyric acid	R	118	Lithium hydroxide	R	190	Styrene	N
47	Calcium oxide (diluted)	R	119	Magnesium chloride	R	191	Sulfur chloride	R
48	Calcium salts	R	120	Magnesium sulfate	R	192	Sulfur dioxide	R
49	Carbon (di)sulfide	N	121	Malic acid	R	193	Sulfuric hexafluoride	R
50	Carbon dioxide	R	122	Manganese salts	R	194	Sulfuric trioxide	R
51	Carbon tetrachloride	T	123	Mercury salts	R	195	Sulfuric acid (dil.)	R
52	Chloroacetic acid	R	124	Methane	N	196	Sulfuric acid (med.conc.)	R
53	Chlorine (wet)	R	125	Methanol (<40%)	R	197	Sulfuric acid (conc.)	R
54	Chlorine (dry)	R	126	Methanol (>40%)	T	198	Sulfurous acid	R
55	Chlorobenzene	N	127	Methyl chloride	R	199	Swimming pool water	R
56	Chlorobromomethane	N	128	Methyl-ethyl-ketone	R	200	Tannic acid	R
57	Chloroform	N	129	Methylene chloride	R	201	Tanning extracts	R
58	Chlorosulfonic acid	R	130	Milk	R	202	Tartaric acid	R
59	Chromic acid	R	131	Mixes acid (40%)	R	203	Tin salts	R
60	Chromium salts	R	132	Molybdenum disulfide	R	204	Titanium salts	R
61	Citric Acid	R	133	Monoethanolamide	T	205	Toluene (toluol)	N
62	coolant	R	134	Naphtha	N	206	Trichloroacetic acid	R
63	Copper salts	R	135	Natural gas	N	207	Trichloroethylene	N
64	Cresol	N	136	Nickel salts	R	208	Tri-sodium	R
65	Cyclohexane	N	137	Nitric acid (diluted)	R	209	Turpentine	N
66	Cyclohexanone	N	138	Nitric acid (med. Conc.)	R	210	Urea	R
67	Diacetone alcohol	R	139	Nitric acid (conc.)	R	211	Uric Acid	R
68	Dimethyl formamide	R	140	Nitrobenzene	N	212	Vinyl plastisol	N
69	Essential oils	R	141	Nitrogen oxides	R	213	Water	R
70	Ethers	N	142	Nitrous acid	R	214	Water (brine)	R
71	Ethyl acetate	R	143	Oils animal	T	215	Xylene (Xylol)	N
72	Ethyl alcohol (Ethanol)	T	144	Oils mineral	T	216	Zinc chloride	R

R: Resistant N: Not resistant T: Test recommended before use

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13. MAINTENANCE RECOMMENDED SPARE PARTS

For stocking spare part for the new Stationary Leak Testers please find the recommended parts list below. Spare parts requests or quotes please contact service@oxipack.com

Article number	Description	Recommended quantity by number of machines		
		1 Machine	2 Machines	5 and more Machines
Model type *	SLT			
1	OX4071 Hinge lock			2
2	OX4063 Sensor			1
3	OX1024 Filter			
4	OX1114 Mac Valve			2
5	OX4039 Small O-ring	3	6	6
6	OX4088 Gasspring		2	4
7	OX2016 Screw for Gasspring on lid			1
8	OX4074 Ring Black			4
9	OX4075 Ring White			4
10	OX2027 M6 x 18 for Flange			5
11	OX4038 O-Ring lid	1	1	3
12	OX0003 Rubber Membrane	2	4	4
13	OX0004 M5 x 10 RVS	1	2	4

■ = Only after approval of Oxipack Support Desk, these can be replaced P

Numbers in image correspond with the table above.

