





 MEAT	 CHEESE	 VEGETABLES	 SOUP, SAUCES, LIQUIDS AT 80 °C	 SOUP, SAUCES, LIQUIDS AT 40 °C	 SOUP, SAUCES, LIQUIDS ROOM TEMPERATURE	 NON FOOD
VACUUM LEVEL ( % )	<b>99,5</b>	<b>99-94</b>	<b>85-79</b>	<b>79</b>	<b>93</b>	<b>94</b>	-
VAC PLUS	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	-
VACUUM LEVEL ( MBAR)	<b>5</b>	<b>10-50</b>	<b>150-200</b>	<b>200</b>	<b>65</b>	<b>55</b>	<b>40-80</b>

### Note 1:

When using liquid products: Vacuum lowers the boiling point of liquids so they will boil at a lower temperature, which makes itself noticeable through the formation of bubbles in the pouch (If your vacuum packaging machine have a clear lid you can see this process) Proceed immediately to stop the vacuum cycle and pouch will be sealed. A good vacuum setting will not allow the liquid to boil (around 10 MBAR over boiling point).

### Note 2:

To pack liquid products like soup, sauces, etc., use the inclined support (**SEE PRICE LIST FOR OPTIONAL SS TILTED INSERT FOR LIQUID PRODUCTS**).

#### NOTES RELATED TO VACUUM

1. If possible products should be cold.
2. Is not recommended to pack hot products unless necessary.
3. The cooler and dryer a product is, less will be the residual pressure inside the pouch, a lower value means less oxygen (air) in the finished package, a lower pressure, so a better vacuum.
4. After sealing a package under vacuum, check if the product is completely wrapped tight in the pouch. If it's not the case, there is a leak (sealing area or pouch damage) or vacuum setpoint is too low.

#### NOTED RELATED TO POUCHES

1. Choose the proper pouch size, avoid to use oversized packages as it will ensure a lower material cost, a lower amount of waste, a nicer appearance and a better shelf life of the product.
2. Avoid the contamination of package sealing area or clean it if needed, this will prevent problems with sealing quality, which could be the cause of slow leaks, bubbles, or holes in the seal.

#### NOTES RELATED TO SEALING

1. Sealing time will be depend on quality of the package, thickness and if contamination is present on sealing area.
2. Standard Pouch PA/PE thickness is 100 MICRONS which is best suited for most gastronomic products.
3. Sealing time should be approximatively 1.5 Seconds.
4. If you have a leak in the seal, either the package is dirty in the sealing area, the sealing time is too short or the package has been damaged by sharp product or a sharp corner.
5. You can determine if there is a good sealing quality if the sealing seam is transparent and secure and cannot be torn open by hand.
6. In case machine is equipped with electric cut off option to remove excess package, the sealing time will be set correctly if the excess film can be removed easily but not detaching from the bags by itself.

#### NOTES RELATED TO FILLER PLATES AND POUCHES IN THE CHAMBER

1. Filler plates should reduce volume of the chamber, this will allow a faster vacuum since less air need to be pumped out of the chamber and will also help to correctly position the product on the sealing bar.
2. Pouch collar must go over sealing bar by approx. 2 - 3 cm.
3. Pouch collar must not protrude outside the chamber, otherwise the pouch will be not evacuated.

#### NOTES RELATED TO GAS FLUSH (MAP = MODIFIED ATMOSPHERE PACKAGING) FOR MACHINES EQUIPED WITH GAS FLUSH OPTION

1. The most common gasses used in gas flush are nitrogen (N<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>). They are sterile, considered harmless and replace the previously removed air in the packages to avoid shrinking.
2. Flushing time will vary depending on customer requirements, an usual time will be around 2 seconds.
3. There is a risk of explosion if customer use more than 21% Oxygen (O<sub>2</sub>). Please inform Sipromac if the customer require a machine with higher oxygen concentration.
4. Pull pouch opening over gas nozzles so that the inert gas can flow directly into it.

#### NOTED RELATED TO WORKING CYCLE ON MANUAL VACUUM CHAMBER MACHINES

1. Put product inside the pouch(es).
2. Position the pouch(es) on the sealing bar.
3. Close the lid (Press down until held down by vacuum).
4. The air is sucked out of the chamber at the same time than the pouch(es). The vacuum % displayed on control panel will increase.
5. If the machine is equipped with gas flush option, the gas is injected into the pouch(es).
6. The pouch(es) are sealed.
7. Air is let inside the chamber (venting).
8. The lid open.

# VACUUM GUIDELINE

VACUUM TABLE TOP  
350D



VACUUM LEVEL %	MBAR	VAC PLUS	SEALING TIME (SECONDS)	TOTAL CYCLE TIME	PUMP
99,5%	5	0	2	36	20 m³/hr
99,2%	9	0	2	32	20 m³/hr
99,0%	10	0	2	30	20 m³/hr
98,8%	12	0	2	29	20 m³/hr
98,5%	15	0	2	28	20 m³/hr
98,2%	18	0	2	27	20 m³/hr
98,0%	20	0	2	26	20 m³/hr
97,8%	21	0	2	25	20 m³/hr
97,5%	24	0	2	25	20 m³/hr
97,2%	26	0	2	24	20 m³/hr
97,0%	29	0	2	23	20 m³/hr
96,8%	31	0	2	23	20 m³/hr
96,5%	33	0	2	23	20 m³/hr
96,2%	36	0	2	23	20 m³/hr
96,0%	38	0	2	22	20 m³/hr
95,8%	40	0	2	22	20 m³/hr
95,5%	42	0	2	22	20 m³/hr
95,2%	46	0	2	21	20 m³/hr
95,0%	47	0	2	21	20 m³/hr
94,8%	49	0	2	21	20 m³/hr
94,5%	53	0	2	21	20 m³/hr
94,2%	55	0	2	21	20 m³/hr
94,0%	57	0	2	20	20 m³/hr
93,0%	66	0	2	20	20 m³/hr
92,0%	76	0	2	20	20 m³/hr
91,0%	87	0	2	19	20 m³/hr
90,0%	94	0	2	18	20 m³/hr
89,0%	103	0	2	17	20 m³/hr
88,0%	114	0	2	17	20 m³/hr
87,0%	124	0	2	17	20 m³/hr
86,0%	132	0	2	16	20 m³/hr
85,0%	143	0	2	16	20 m³/hr
84,0%	151	0	2	16	20 m³/hr
83,0%	160	0	2	15	20 m³/hr
82,0%	171	0	2	14	20 m³/hr
82,0%	184	0	2	14	20 m³/hr
80,0%	192	0	2	14	20 m³/hr
79,0%	200	0	2	14	20 m³/hr

VACUUM LEVEL %	MBAR	VAC PLUS	SEALING TIME (SECONDS)	TOTAL CYCLE TIME	PUMP
99,5%	4	0	2	31	100 m³/hr
99,2%	7	0	2	29	100 m³/hr
99,0%	9	0	2	27	100 m³/hr
98,8%	11	0	2	26	100 m³/hr
98,5%	13	0	2	25	100 m³/hr
98,2%	16	0	2	24	100 m³/hr
98,0%	17	0	2	24	100 m³/hr
97,8%	20	0	2	23	100 m³/hr
97,5%	22	0	2	22	100 m³/hr
97,2%	26	0	2	22	100 m³/hr
97,0%	27	0	2	21	100 m³/hr
96,0%	37	0	2	20	100 m³/hr
95,0%	46	0	2	19	100 m³/hr
94,0%	55	0	2	18	100 m³/hr
93,0%	66	0	2	17	100 m³/hr
92,0%	74	0	2	17	100 m³/hr
91,0%	84	0	2	16	100 m³/hr
90,0%	95	0	2	16	100 m³/hr
89,0%	106	0	2	16	100 m³/hr
88,0%	113	0	2	15	100 m³/hr
87,0%	122	0	2	15	100 m³/hr
86,0%	134	0	2	14	100 m³/hr
85,0%	144	0	2	14	100 m³/hr
84,0%	153	0	2	13	100 m³/hr
83,0%	159	0	2	13	100 m³/hr
82,0%	171	0	2	12	100 m³/hr
81,0%	178	0	2	12	100 m³/hr
80,0%	185	0	2	12	100 m³/hr
79,0%	199	0	2	11	100 m³/hr

VACUUM DOUBLE CHAMBER  
620A

