Filling Ranges - Liquids











EXAMPLE SACHET SIZES FOR FLUIDS (MM)	FILLING (ML)	FILLING WITHOUT REMAINING AIR (ML)								
AVERAGE VISCOSITY AT 20° - MPA.S	84		1.500		10.000		50.000		100.000	
SACHET EXAMPLES	OIL TYPES		CREAM TYPES		GEL TYPES		HONEY TYPES		BUTTER TYPES	
40x50	0.2 - 1.0	0.7	0.2 - 1.2	1.0	0.2 - 1.2	1.0	0.2 - 1.5	1.2	0.2 - 1.6	1.3
50x50	0.3 - 1.2	0.8	0.3 - 1.3	1.1	0.3 - 1.3	1.2	0.3 - 1.5	1.3	0.3 - 1.6	1.4
40x80	0.5 - 3.0	2.5	0.5 - 4.0	3.5	0.5 – 4.0	3.5	0.5 -6.0	5.0	0.5 – 7.0	6.0
50x80	1.0 - 5.0	3.5	1.0 - 6.0	4.0	1.0 – 6.0	5.0	1.0 – 7.0	6.0	1.0 – 8.0	7.0
60x100	2.0 - 12.0	10.0	2.0 - 12.0	10.0	2.0 – 14.0	12.0	2.0 – 16.0	15.0	2.0 – 16.0	15.0
85x100	5.0 - 22.00	19.0	5.0 - 25.0	20.0	5.0 -26.0	22.0	5.0 – 28.0	25.0	5.0 – 29.0	27.0
100x100	10.0 - 30.0	25.0	10.0 - 32.0	27.0	10.0 - 35.0	30.0	10.0 – 38.0	30.0	10.0 – 40.0	30.0

NOTES:

- 1. ANY SACHET SIZE BETWEEN 40X50 MM AND 100X100 MM IS POSSIBLE. SACHETS CAN ALSO BE MADE IN ROUND SHAPES
- 2. MINIMUM FILLING VOLUME IS 0.2 ML, MAXIMUM FILLING VOLUME IS 40 ML, DEPENDING ON PRODUCT CATEGORY AND SACHET SIZE
- 3. IN PRODUCTIONS WHERE SACHETS ARE FILLED WITH REMAINING SPACE AND AIR, THE AIR CAN BE EXCHANGED WITH GAS
- **4.** MACHINE PRODUCTION SPEED MAY VARY DEPENDING ON VISCOSITY OF FILLING MATERIAL; VISCOSITY CAN BE REDUCED BY OPERATING TEMPERATURE
- 5. IF THE MATERIAL USED IS A FULL ALU BASED (TOP AND BOTTOM), CONSIDER A SUGGESTED AVERAGE FILLING OF 0.1 ML LESS BECAUSE THE ALUMINIUM IS NOT ELASTIC
- 6. STANDARD FILLING PRECISION IS ± 0.2
- 7. ML PHARMACEUTICAL-GRADE FILLING SYSTEM IS AVAILABLE FOR FILLING VOLUMES BELOW 0.5 ML THAT REQUIRE MORE PRECISION
- 8. HIGHER FILLING VOLUMES ARE POSSIBLE THROUGH HIGHER FLEXIBLE TOP MATERIAL
- 9. FILLING VOLUMES AND SACHET SIZES FOR POWDERS NEED TO BE DETERMINED PER PRODUCT TYPE, BASED ON GRANULATION, MECHANICAL VISCOSITY, SPECIFIC WEIGHT AND DEGREE OF DUSTINESS
- 10. FOR HIGHER SHELF LIFE REQUIREMENTS, BARRIERS OF ALUMINIUM AND SIOX SILICA COATING ARE AVAILABLE



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