PALL Food and Beverage

Seitz® T Series Depth Filter Sheets

For General Industrial Filtration Applications

Seitz T series depth filter sheets were developed for coarse and clarifying filtration of many fluids in the food and beverage industry.

Description

The “T” stands for technical because these filter sheets are designed for general industrial filtration duties. T 120 through T 950 are specifically designed for clarifying filtration. With their positive ZETA potential, these depth filters contain a high adsorption capacity. T 1000 through T 5500 have no ZETA potential. This range of the T series is characterized by its open structure and is well suited for filtration of high suspended solids and viscous applications.

From the selection and quality control of raw materials to application of the latest production technologies, the T series filter sheets meet the highest quality standards.

Features	Benefits
Homogenous and consistent media, available in multiple grades	• Suitable for a variety of applications • Proven and reliable performance
Reduced density and high porosity media with low filtration resistance	• Economical filtration • High particle holding capacity resulting in long filtration cycles and high throughputs • Suitable for filtration of viscous materials, retention of gel particles or coarse dispersed substances at low differential pressures
Each individual filter sheet is laser etched with the sheet grade, batch number and production date.	• Full traceability

Quality

- Filter sheets produced in a controlled environment
- Manufactured according to ISO 9001:2008 certified Quality Management System

Food Contact Compliance

Please refer to the Pall website www.pall.com/foodandbev for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.

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Seitz T Series Filter Sheets

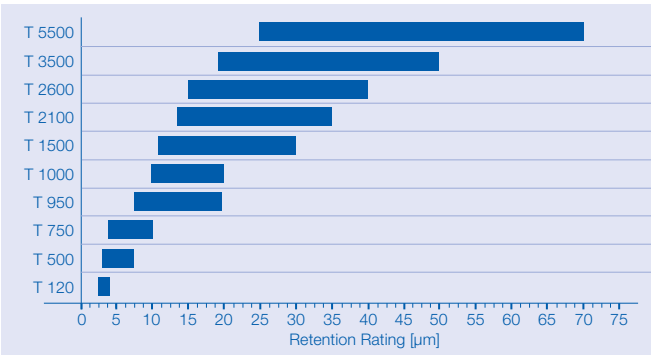
Main Constituents

T 120, T 500, T 750, T 950, T 1000, T 1500, T 2100, T 3500	cellulose, perlite
T 2600, T 5500	cellulose

Applications

Grade	Application
T 120 T 500 T 750 T 950	Coarse filtration of rennet Coarse clarification of rapeseed and wheat germ oil Fine filtration of sugar syrup
T 1000 T 1500 T 2100 T 3500	Wine clarification Coarse filtration of natural extracts Coarse filtration of sugar syrup Coarse filtration of honey and edible oils
T 2600 T 5500	Sugar syrup clarification Particle removal in spirits Clarification of enzyme solutions

Relative Retention Rating[1]



[1] Effective removal performance of filter sheets is dependent on process conditions.

Characterization

Grade	Mass per Unit Area g/m²	Thickness mm	Ash %	Water Permeability[2] L/m²/min (gal/ft²/min)
T 120	900	2.8	43	213 (5.3)
T 500	850	2.7	38	465 (11.6)
T 750	850	2.7	40	565 (14.1)
T 950	850	2.8	40	1,700 (42.5)
T 1000	950	3.6	35	3,400 (85)
T 1500	850	3.7	33	7,285 (182.1)
T 2100	700	3.3	15	10,200 (255)
T 2600	700	2.9	< 1	10,200 (255)
T 3500	888	4.6	15	12,750 (318.8)
T 5500	750	4.5	< 1	25,500 (637.5)

These figures have been determined in accordance with in-house test methods and the methods of the Technical/Analytical Work Group within the European Depth Filtration Association.

[2]The permeability was measured under test conditions with clean water at 20 °C (68 °F) and a Δp of 1 bar (14.5 psi).

Regeneration

T series filter sheets may be rinsed with clean water (in the forward or reverse[3] direction) to increase throughput and to optimize economic efficiency. Optimal regeneration of filter sheets installed in a plate and frame filter may be achieved with serial rinses of warm water followed by hot water. An example protocol is shown below.

1. Rinse with warm water (60 °C / 140 °F) for 15 minutes
2. Rinse with hot water (70 – 80 °C / 158 – 176 °F) for 8 – 10 minutes

The rinse flow rate should be equivalent to the filtration flow rate with a back pressure of 0.5 –1 bar (7.2 –14.5 psi).

[3]When rinsing in the reverse flow direction it is critical to control particulate and microbial levels in the rinse water so that the filtrate side of the sheet is not contaminated. Water used for reverse flow flushes should be particle-free, and if the filter will not be sterilized prior to re-use the water should be free of microbes. Backwashing should be in a diagonal direction from outlet to inlet in a plate and frame filter.

Sterilization and Sanitization

Method	Temperature °C (°F)	Maximum Differential Pressure bar (psi)	Time[4]/ Cycle min
Steam	125 (257)	0.5 (7.2)	20
Hot Water	90 (194)	1 (14.5)	30

[4]The actual time required may vary as a function of the process conditions.

Filtration Guidelines

Please contact Pall for recommendations on your specific filtration process as results may vary by product, pre-filtration and filtration conditions.

For additional operating guidelines, including rinsing of sheets prior to use, please refer to instructions provided by Pall.

Available Sheet Formats

Rectangular Sheets

400 mm x 400 mm (15.8" x 15.8")
600 mm x 612 mm (23.6" x 24.1")

Folded Sheets

1003 mm x 2016 mm (39.5" x 79.3")
1205 mm x 2420 mm (47.4" x 95.3")

Other formats are available on request.
Seitz T series filter sheets are also available in SUPRAdisc™ module configurations. Please contact Pall.

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Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

Because of technological developments related to the products, systems, and/or services described herein, the data and procedures are subject to change without notice. Please consult your Pall representative or visit www.pall.com to verify that this information remains valid.

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