

# X-FLOW S 0325

## CLASSIC ULTRAFILTRATION MEMBRANE

### MEMBRANE DATASHEET

ARTICLE CODE: SD80600Z

#### BASIC CHARACTERISTICS

- Polysulfone tubular membrane cast on a composite polyester non-woven carrier
- Developed for use in a variety of ultrafiltration processes in industrial food and non-food applications

#### APPLICATIONS

- Concentration of modified starch waste water
- Manufacture of starch derivates
- Economical direct conversion of sour skimmed milk into quark
- Concentration of whole milk for cheese production
- Cost effective water removal from whole egg, egg white, fermented egg white and rinsing water

#### MEMBRANE COMPOSITION

- Membrane material composed of polysulfone
- Structure asymmetric
- Membrane carrier is a polyester non-woven
- Tubular geometry

#### PERFORMANCE DATA

Parameter	Unit	S 0325	Remarks
Initial flux	l/m <sup>2</sup> .h.100 kPa	40 ± 10	RO-water at 25 °C
Transmembrane pressure	kPa	-20 .. + 1000	
Molecular weight cutoff	Dalton	100000	90% rej. on dextrans
		20000	90% rej. on peg
pH		2 - 10	at 25 °C
Chlorine exposure	ppm.h	200000	at 25 °C
Temperature	°C	1 - 70	
Hydrolic diameter	mm	14.5	
Length	m	1 - 6	

Operation of membranes at any combination of maximum limits of pH, concentration, pressure or temperature, during cleaning or production, will severely influence the membrane lifetime.

#### SOLVENT RESISTANCE

Since the resistance of the membrane to solvents strongly depends on the actual process conditions, the indications given below should only be considered as guidelines.

Organic acids	++
Organic esters, ketones, ethers	+
Aliphatic alcohols	++
Non polar aliphatic compounds	++
Aromatic compounds	+
Formaldehyde	++

# X-FLOW S 0325

## CLASSIC ULTRAFILTRATION MEMBRANE

### MEMBRANE DATASHEET

#### CLEANING

Depending on the nature of the feed solution the following cleaning agents can be chosen:

Chemical		
	Chlorine	500 ppm max.
	Hydrogen peroxide	1000 ppm max.
	Sodium hydroxide	pH 11.5 max.
	Nitric acid	pH 1 min.
	Phosphoric acid	pH 1 min.
	EDTA	pH 11.5 max.
	Sodium tri-phosphate	
	Citric acid	
	Enzymatic compounds	

It is recommended to keep the pH between 1 and 11 and not to exceed a temperature of 35°C during cleaning and/or disinfection.

If those standard cleaning techniques fail to remove the foulants, more concentrated cleaning solutions can be tried. Please contact X-Flow for recommendations.

It has to be stressed, however, that no warranty can be given on the efficiency of any cleaning nor on the membrane performance after such cleaning attempts.

Before using new membranes and after long term storage, we advise to do a cleaning and disinfection run in order to remove residues of conservation agents.

After cleaning we advice to discharge at least 25 litres of permeate per m<sup>2</sup> of membrane area.

#### STORAGE

New membranes can be stored as supplied.

After being used, storage is required in humid environment or in a solution of 250 ppm SPECTRUS NX1164 (BetzDearborn) in water at a temperature of 1 – 35 °C.



#### X-FLOW BV

P.O. BOX 739, 7500 AS ENSCHEDE, NETHERLANDS WWW.X-FLOW.COM

Note: The information and data contained in this document are based on our general experience and are believed to be correct. They are given in good faith and are intended to provide a guideline for the selection and use of our products. Since the conditions under which our products may be used are beyond our control, this information does not imply any guarantee of final product performance and we cannot accept any liability with respect to the use of our products. The quality of our products is guaranteed under our conditions of sale. Existing industrial property rights must be observed.  
DS CLAS S0325 E-3414 © 2014 Pentair, All Rights Reserved.

