ION EXCHANGE
Refreshing the Planet

Case Study

INDION GS 350 SP CL for removal of PFOA from liquid PTFE process stream.

Introduction
In the liquid PTFE (Poly Tetra Flouro Ethylene) manufacturing industry, the PFOA (per Flouro Octanoic Acid) is used as a surface active agent. The residual PFOA concentration in the process stream is about 1700 ppm to 2000 ppm.

Challenge:
1. PFOA is a carcinogen and hence needs to be removed from the liquid PTFE

2. To reduce PFOA to less than 50 ppm which is the limit as per regulatory norms

Solution:
The liquid PTFE containing PFOA is allowed to contact with INDION GS 350 SP CL in a stirred tank for reducing the PFOA content. INDION GS 350 SP CL effectively reduces the PFOA content in the liquid PTFE to less than 50 ppm levels. After 18 to 20 hours of contact, the resin is filtered from the liquid PTFE to give liquid PTFE which meets, the regulatory norms.

Details of batch process:

	INDION GS 350 SP CL
Resins qty, lit	100 to 200
Volume of liquid PTFE treated, m^3	17 - 18
Residence time, hrs	18 - 20

Results:

Parameters	PFOA, ppm
Inlet	1700 - 2000
Outlet	< 50

Corporate Office: Ion House, Dr. E. Moses Road, Mahalaxmi, Mumbai 400 011
Tel: +91 3989 0909 | E-mail: hocro@ionexchange.co.in | Website: www.ionresins.com

0918