Regeneration of SPG membrane

< Attention >

: Please do not touch the SPG membrane barehanded. When oil of the hand attaches to the SPG membrane surface, surface of the SPG membrane is changes.

When you handle SPG membrae, please have clean gloves.

: Please attach a tool for protection (Glove, Goggle etc) not to be hurt even if damaged.

: When you use a solvent, please work in appropriate environment.

The regeneration, please reach in order of follows.

1. Organic solvent cleaning

Method: It let you immerse SPG membrane in a solvent and run to an ultrasonic washer.

Time : 30 minutes

- * Please use the solvent which can drop the liquid which you used for a test.
- * When a dirt does not come off, please go repeatedly.

2. Heat cleaning

Method: It put SPG in a heat-resisting glass container and burn at 500 ☐ for 8h.

- * When it is colored (black or brown is carbide) on the surface of SPG membrane, please go the heat cleaning repeatedly. Please go until the surface of the SPG membrane whitens.
- * The heat resistance of the SPG membrane is 500 . When temperature rises further, pore broke.
- * Please remove the solvent before heating.

3. Acid dipping (Recovery of the hydrophilic group)

Method: It let you immerse SPG membrane in 2N Hcl and run to an ultrasonic washer.

Time : 60 minutes

4. Ion exchanged water dipping (Neutralization of the acid)

Method: It let you immerse SPG membrane in Ion exchanged water and run to an ultrasonic washer.

Time : 30 minutes × 3times

5. Drying

Method : It put SPG membrane in a heat-resisting glass container and am dried at 60 □ more than 8 hours.

6. Storage

Method: SPG membrane enter the plastic bag and seal.

* Please regeneration SPG membrane which you did not use for a long term.

* Hydrophobic membrane

After having regeneration, SPG membrane performs hydrophobic coating.

SPG technology CO., LTD.

Address:16079-41, Higashikaminaka, Sadowaracho, Miyazaki-City, Miyazaki, Japan. Postal Code:880-0303 E-mail:spg@spg-techno.co.jp http://www.spg-techno.co.jp