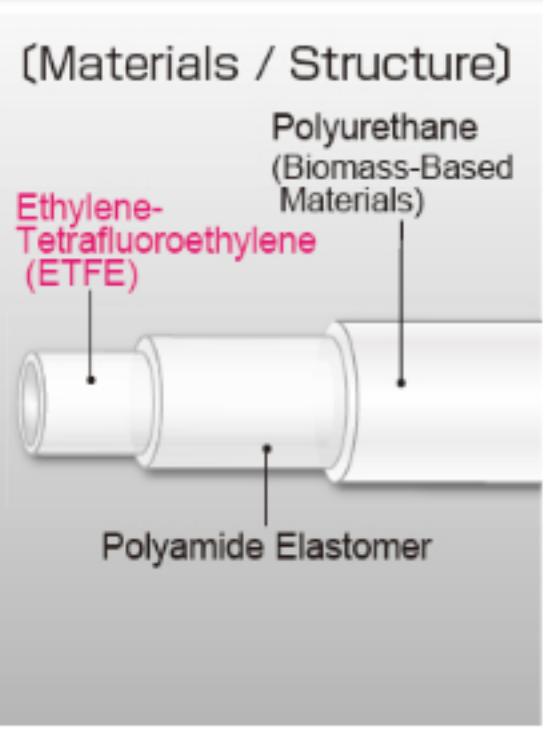


Flexible Fluorine (ETFE) Resin Tubing (Eco-Friendly Type) [Model Number: E-SJECO]

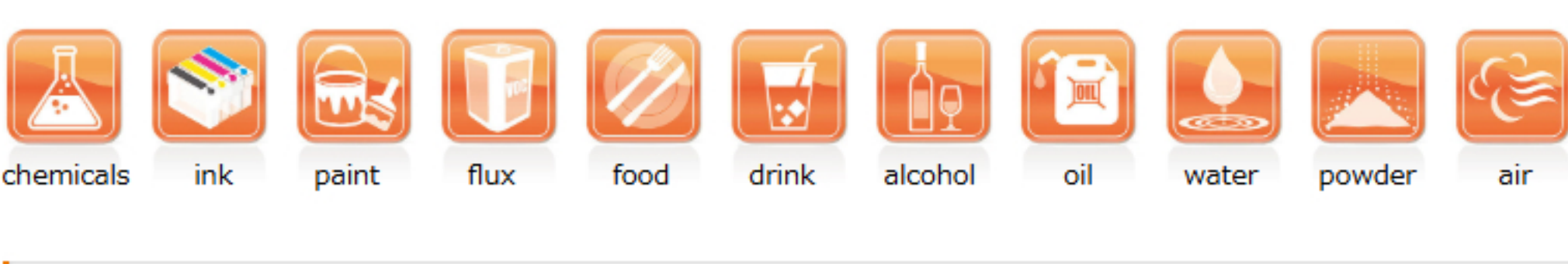


Flexible Fluorine (ETFE) Resin Tubing (Eco-Friendly Type) [E-SJECO] is a multi-layer fluorine tubing that uses **plant-derived raw polyurethane materials (biomass-based polyurethane materials)**, which reduces petroleum resource-derived plastics by **25%**, compared to our standard product of [Flexible Fluorine \(ETFE\) Resin Tubing \[E-SJ\]](#).

As a manufacturer of plastic tubing and hoses, HAKKO continues to develop environmental-friendly products to contribute to a sustainable world.

Single-layer teflon tubing is hard (stiff) and easy to break. Our Flexible Fluorine (ETFE) Resin Tubing (Eco-Friendly Type) is a sustainable tubing that is alternative for a teflon tubing.

Fluids



Applications

- For Industrial Ink-Jet Printers (For Ink-Supplying Pipes)
- For Transferring Chemicals used in Laboratory/Medical Equipment
- For Transferring Inks and Solvents
- For Transferring Beverage and Food
- For Transferring Chemicals used in Semiconductor-Related Devices and Flat Panel Display (FPD) Manufacturing Devices
- For Transferring Chemicals used in Manufacturing Fuel Cell and Pure Water
- For Printing Head, Wide-Format Ink-Jet Printers, Textile Printers, Ceramic Tile Printers, 3D Printers
- For Filling Line of Paints and Adhesives

Functions

Solvent Resistance

Non-PVC

Non-Adhesiveness

Chemical Resistance

Low Elution

Low Odor

Food-Sanitation

Flexibility

Washability

Transparency

Oil-Proof

Liquor and Alcohol

Alcohol Resistance

Ink Resistance

Characteristics

- **Environment-Friendly Materials**...E-SJECO uses plant-derived raw materials (biomass materials) that reduce petroleum resource-derived plastics by 25%. We can issue the certificate [upon request](#).
- **Chemical Resistance**...Since the inner layer is made of ETFE fluorine resin, E-SJECO is resistant to most of the chemical substances.
- **Flexibility**...Due to the laminated structure, compared with a single-layer fluorine tubing, E-SJECO is superior in flexibility. This improves your work efficiency.
- **Hard to Break**...Unlike a single-layer fluorine tubing, E-SJECO is less likely to break. (Even if it breaks, you can restore its shape to some extent.)
- **Higher Non-Adhesiveness**...Since ETFE fluorine resin is superior in terms of water-proof, you can wash out the fluids very easily.
- **Abrasion Resistance**...Fluorine resin (inner layer) shows high levels of abrasion resistance. Thus, you can even transfer chemical slurry.
- **Plasticizer-Free**...E-SJECO does not contain plasticizer (an elution material) at all. E-SJECO is an oil-free tubing.
- **Low Elution and Low Odor**...Since E-SJECO contains very low levels of elution and odor, it is highly recommended for use in transfers of cosmetics.
- **High Purity**...Fluorine resin does not contain any additives such as plasticizer, so E-SJECO is suitable for transferring high purity chemical fluids.
- **Transparency**...E-SJECO enables you to check the fluid very easily.
- **Original Fittings**...By using our original fittings, you can avoid accidents which are caused by incorrect choices of hose and fittings. For more information on our original fittings, please scroll down to the end.

Certificates and Regulations

- **RoHS Compliant**...E-SJECO is compliant with RoHS requirements (Directive: (EU) 2015/863). (RoHS Compliant means that E-SJECO does not contain RoHS 10 restricted substances or it does not exceed the upper threshold of RoHS 10 restricted substances.) Certificate is available [on request](#).
- **EU REACH and UK REACH**...E-SJECO is compliant with REACH SVHC 31st list (242 substances). Certificate is available [on request](#).
- **Non-Use of UV-328**...E-SJECO does not contain UV-328. Certificate is available [on request](#).
- **TSCA (Toxic Substance Control Act) Compliance**...E-SJECO does not use decaBDE, PIP(3:1), 2,4,6-TTBT, PCTP and HCBd. Certificate is available [on request](#).
- **PFOA and POFS**...E-SJECO does not contain perfluorocarboxylic acids (PFCAs C 9 - C 14), their salts or PFOA-related substances. Certificate is available [on request](#).
- **Food Sanitation**...E-SJECO conforms to the Food Sanitation Law No.380 (No.380 of the Ministry of Health and Welfare for Food Sanitation) (Conformity to N-Heptane) and the Partial Revision of Standards for Food and Additives (Positive List System) [No.324 of the Ministry of Health, Labour, and Welfare]. Regarding the conformity of "Partial Revision of the Food Sanitation Law" (Effective on June 1, 2020) and Positive List System (PL), please download [here](#).
- **Regulation (EC) No 1935/2004 and (EU) No 10/2011**...An inner layer of E-SJECO is compliant with (EC) No 1935/2004 and (EU) No 10/2011.
- **Compliance with ADI/TSE/BSE Free**...An inner layer of E-SJECO does not contain ADI, TSE, and BSE.

Packing Images



Product Standard

Standard Size

Model Number	Standard Length	I.D. × O.D.	Working Pressure	Working Pressure	Minimum Bend Radius
			20°C	20°C	20°C
	m	mm	MPa	Bar	mm
E-SJECO-4×6	20	4×6	0 - 0.6	0 - 6	25
	100				
E-SJECO-6×8	20	6×8	0 - 0.4	0 - 4	50
	100				

Made-to-Order Size Example

Model Number	I.D. × O.D.	Working Pressure	Working Pressure	Minimum Bend Radius
		20°C	20°C	20°C
	mm	MPa	Bar	mm
SJECO-1×3	1×3	0 - 1.0	0 - 10	10
SJECO-1.5×3	1.5×3	0 - 0.6	0 - 6	10
SJECO-2×4	2×4	0 - 0.6	0 - 6	15
SJECO-2.5×4	2.5×4	0 - 0.6	0 - 6	25
SJECO-3×4	3×4	0 - 0.6	0 - 6	30
SJECO-3×5	3×5	0 - 0.6	0 - 6	20
SJECO-5×8	5×8	0 - 0.6	0 - 6	30
SJECO-5×8	6×9	0 - 0.6	0 - 6	35
SJECO-7×10	7×10	0 - 0.4	0 - 4	50
SJECO-8×10	8×10	0 - 0.4	0 - 4	90
SJECO-8×12	8×12	0 - 0.6	0 - 6	50
SJECO-9×12	9×12	0 - 0.5	0 - 5	65
SJECO-1/8"×1/4"	3.18×6.35	0 - 0.6	0 - 6	20
SJECO-1/4"×3/8"	6.35×9.53	0 - 0.6	0 - 6	45

- Temperature Range : -20 - 80 °C (-4°F - 176°F)
- Color : Clear