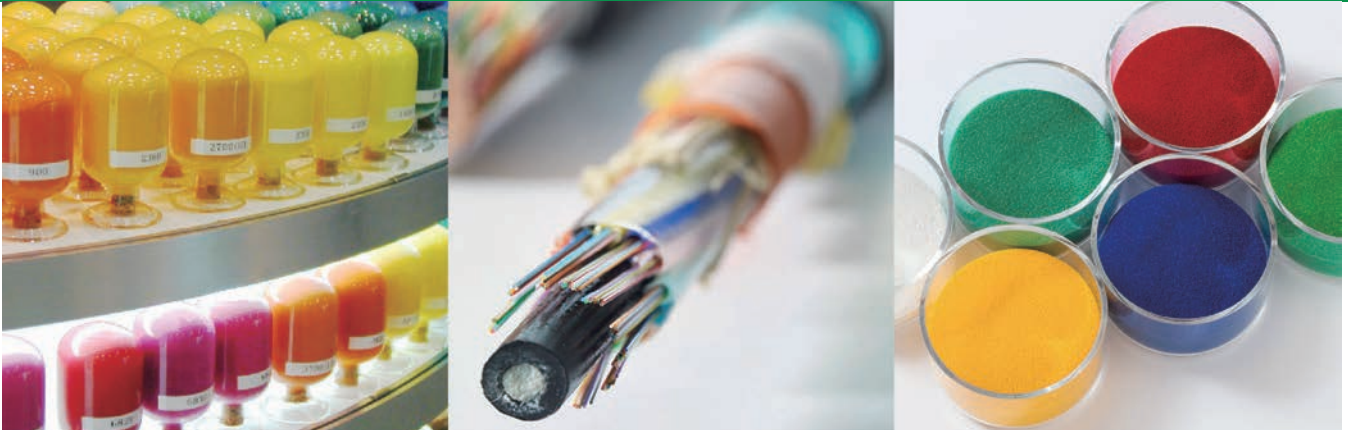


Colorants for FEP / ETFE / PFA



Our “FCM Series” can solve the following problems with coloring of fluoropolymer.

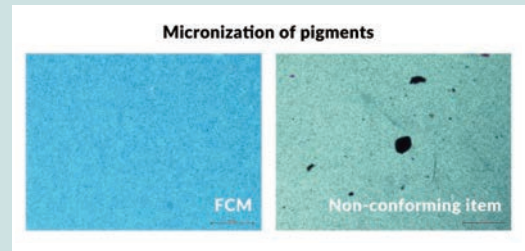
- | | | | | |
|---|---|-------------------|--|---|
| 1 | 2 | 3 | 4 | 5 |
| Foreign matters caused by insufficient pigment dispersion | Degradation of resin properties caused by colorants | Unstable coloring | Incompatibility with processing conditions | Time-consuming preparation / surplus stocks of special colors |

An extensive product lineup that gives both high quality and superior performance

1 An advanced pigment dispersion suitable for ultra-thin layer

It is desirable that colorants for fluoropolymer covering materials of electric wire give superior color identification properties and hiding power by addition in a smaller amount.

Our “FCM” masterbatch using our advanced pigment dispersion technology enables customers to realize these properties and then produce electric wire with ultra-thin layer.



2 Design with optimal selection of pigments and formulation suitable for fluoropolymer

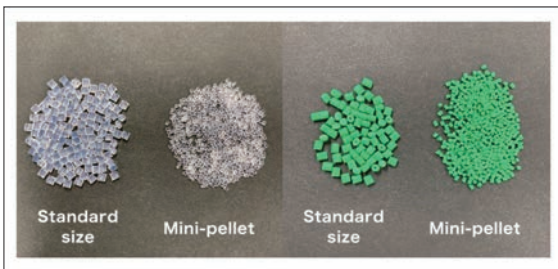
Proper formulation design using carefully selected materials is performed without damaging characteristics of fluoropolymer.

In particular, pigments having processing stability under a high temperature are selected.

Heat resistance evaluation data				
Mixing Temp. (°C)	380			
Mixing Time (Min)	2	5	10	20
Non-conforming item				
ΔE	0	364	2089	4029
FCM H1123 RED				
ΔE	0	276	884	1367
FCM H1323 RED				
ΔE	0	300	1361	2518
FEP 100 Color MB 5				

3 Diverse product lineup

Our “FCM Series” offers a variety of choices from full lineup according to application and types of fluoropolymer, including FEP, ETFE, and PFA, as well as a total solution including color choice based on customer requirements.



4 Mini-pellet suitable for ultra-fine electric wire

Our “FCM” mini-pellet whose size is smaller compared with our standard products, is developed for ultra-fine electric wire with ultra-thin layer, and it is possible to provide a steady supply.

5 Design of a special color

Our extensive product lineup is capable of satisfying customer demands at a high level, and design of a special color is also available on request.



FAQ

Q What types of resin are your colorants applicable to?

A Our colorants are applicable to FEP, ETFE, and PFA. And please contact us if you use other types of resin.

Q How is the net weight?

A It's 10kgs. for general-purpose products.

Q Do you have colorants other than the colorants applicable to fluoropolymer?

A We have an extensive lineup of colorants according to the types of resins, for example, including PVC and olefin resin. Please inform us of the types of resin now in use.

A history of product development

Over 90 years since its establishment, we have refined our own technologies by continuing to fulfill customer needs.

1931

Our company was established aiming for domestic production of pigments that were reliant on imports from Europe and America.



1948

We began developing plastic colorants using our pigment dispersion technology, and entered the plastic colorant business.

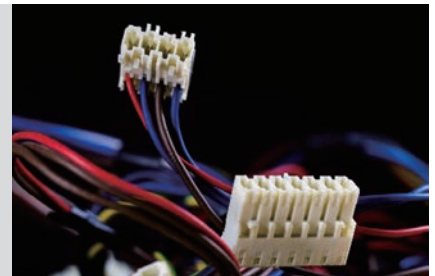
In 1948, we developed and launched masterbatches for soft PVC ahead of the competition, that contain plasticizer with finely dispersed pigment.

Next, we developed and launched other colorants, including, for example, masterbatches for synthetic fibers requiring finely dispersed pigment particles. Meanwhile, we provided optimal colorants for rigid PVC, polyethylene and so on, according to changes in demand for plastics and expansion of applications.

1950's

We began providing colorants for PVC covering materials of electric wire.

In the 1950's, we began providing colorants for covering materials of electric wire and wire harness. Since then, we strived to respond to any technical and service requirements from numerous Japanese domestic companies through our original technologies. As a result, our products have been continued to be adopted and we have grown to become a leading supplier of colorants for PVC covering materials of electric wire in Japan.



1968

We began providing masterbatches for fluoropolymer covering materials of electric wire.

Reflecting our successful track record in the field of PVC electric wire, we continued with development of colorants applicable to fluoropolymer covering materials of electric wire through our original technologies in respond to customer requests.

As a result of development of optimized colorants for processing conditions peculiar to fluoropolymer and also for ultra-fine electric wire, our products have been continued to be adopted by numerous Japanese domestic companies, and we are Japan's top supplier of fluoropolymer covering materials of electric wire at the moment.



We will continue to utilize our expertise and know-how accumulated over many years to meet customer needs.

- A sense of security** We are familiar with physical properties related to pigments as an experienced pigment manufacturer. Therefore, we can produce various colorants with stable quality and provide customers with a sense of security.
- Achievement** We have continued to provide our masterbatches to Japanese manufacturers having a significant share in the market of fluoropolymer electric wire, where specialty products are widely used. Therefore, we can immediately propose and provide an optimum solution to coloring problems, based on our expertise and know-how accumulated in the market.
- Services** In addition to selling our standard products including masterbatches and compounds, we can also respond to customer requirements such as specification changes.

About us

We are a leading company manufacturing colorants in Japan.

We have been expanding our business into a wide variety of fields, while developing pigments, colorants for plastics, printing inks, and polyurethanes through our three core technologies: "Pigment synthesis and surface treatment", "Formulation and dispersion processing", and "Polymer synthesis".



Pigments



Polyurethanes



Gravure inks and adhesives

As a result of our business expansion overseas, our pigments and UV curable coating materials have been adopted for liquid crystal displays, and our polyurethanes have been adopted for automobile interior parts.



We have 19 sales and production bases in 13 countries and regions worldwide outside Japan.



Fiscal Year Ended March 31, 2020