

**STATUS OF GRAFIL™ & PYROFIL™ CARBON FIBER****PRODUCTS UNDER REACH**

(Registration Evaluation Authorization of Chemicals EU Regulation (EC) No 1907/2006)

As a result of discussions between our parent company, Mitsubishi Chemical Corporation of Japan (MCC), the Japan Carbon Fiber Manufacturers Association (JCMA), and the EU legislative bodies involved with REACH, the status of all the products we import into the EU has been confirmed as follows:

**CONTINUOUS CARBON FIBER (UNSIZED)**

Pyrofil™ and Grafil™ continuous carbon fiber products in their raw form (i.e. unsized) are considered to be articles under REACH since they are given a specific shape and design during manufacture, and these features determine the fibers' function to a significantly greater degree than their chemical composition. They also contain no chemical substances that could be released during use of these fibers.

Therefore under the terms of REACH and as articles, our continuous carbon fiber products in their raw form do not require pre-registration or registration.

**CONTINUOUS CARBON FIBER (SIZED)**

For Pyrofil™ and Grafil™ continuous carbon fiber products that contain sizing agents (e.g., epoxy resins), the intent is for the sizing to remain on the fiber during normal use. The sizing exists only to improve the process ability of the carbon fiber.

In this case, the sizing agents would not be subject to the registration provisions of REACH, and like unsized continuous carbon fiber, sized, continuous carbon fiber is also considered to be an article under REACH.

Therefore, under the terms of REACH our sized, continuous fiber products do not require pre-registration or registration.

**PRECISION CUT FIBERS**

Precision cut fibers include chopped and milled carbon fibers. Even in chopped or milled form, the fibers keep their shape, and as their shape is of utmost importance to their function, the chemical composition they are classified as are also articles.

On the basis of the above and in line with the current regulation we can confirm that the Precision Cut Carbon Fibers we supply do not require pre-registration or registration under REACH. In reaching this conclusion we have made our best efforts to provide you with the most current information. However, please accept that we cannot be held liable for any changes in REACH legislation occurring after the issuing of this letter.

We can also confirm that Grafil™ (excluding A-sized fibers and cut fibers) and Pyrofil™ carbon fibers and associated packaging material do not contain any substances of very high concern (SVHC) as per the list issued by the ECHA dated 16 January 2020, nor do they contain any substances which are designated as carcinogenic, mutagenic, or toxic for reproduction (CMR) under REACH.

Grafil™ A-sized fibers, including precision cut fiber PA6-2, do contain trace amounts of Ethoxylated nonylphenol (SVHC listed substance, CAS No. 68412-54-4), as listed in the table below. Precision cut fibers PU6-50, PU6-30, and PA6-30 do not contain Ethoxylated nonylphenol.

Fiber	Type	Ethoxylated Nonylphenol Content (% w/w)
Grafil™ (A-sized)	Continuous	< 0.1
PA6-2	Precision Cut	< 0.1
PU6-1	Precision Cut	0.15 – 0.25
PU6-50	Precision Cut	None
PU6-30	Precision Cut	None
PA6-30	Precision Cut	None

**Bisphenol A (BPA, CAS No. 80-05-7) Content:**

Grafil™, Pyrofil™, and precision cut fibers do not contain BPA at or above the SVHC threshold of 0.1% w/w. Typical concentrations are less than 1 ppm.

MCC and MCCFC, Inc. are committed to meeting the ongoing requirements of REACH, and should the legislation and classification of our products change we will take the actions necessary to meet the new requirements, thus ensuring continuity of supply.

For and on behalf of Mitsubishi Chemical Carbon Fiber and Composites, Inc.



Eric Argent  
Director of Operations

January 2020