



CLAISSE
THE FIRST AND FINEST IN FUSION®

KEEPING AHEAD THROUGH CLAISSE EXPERTISE IN SAMPLE PREPARATION BY FUSION

**Quick and error-free proactive monitoring
of your fusion process**



FUSION®
MONITOR

HOW TO REACH EFFICIENCY WITH CLAISSE EXPERTISE?



Claisse offers a global solution in sample preparation by fusion to improve efficiency in the laboratory. Our knowledge and experience combined with the reputation of PANalytical allow us to constantly innovate to fulfill our customers' needs as well as to help them obtain accurate and precise analytical results.



Instruments



Services



Expertise





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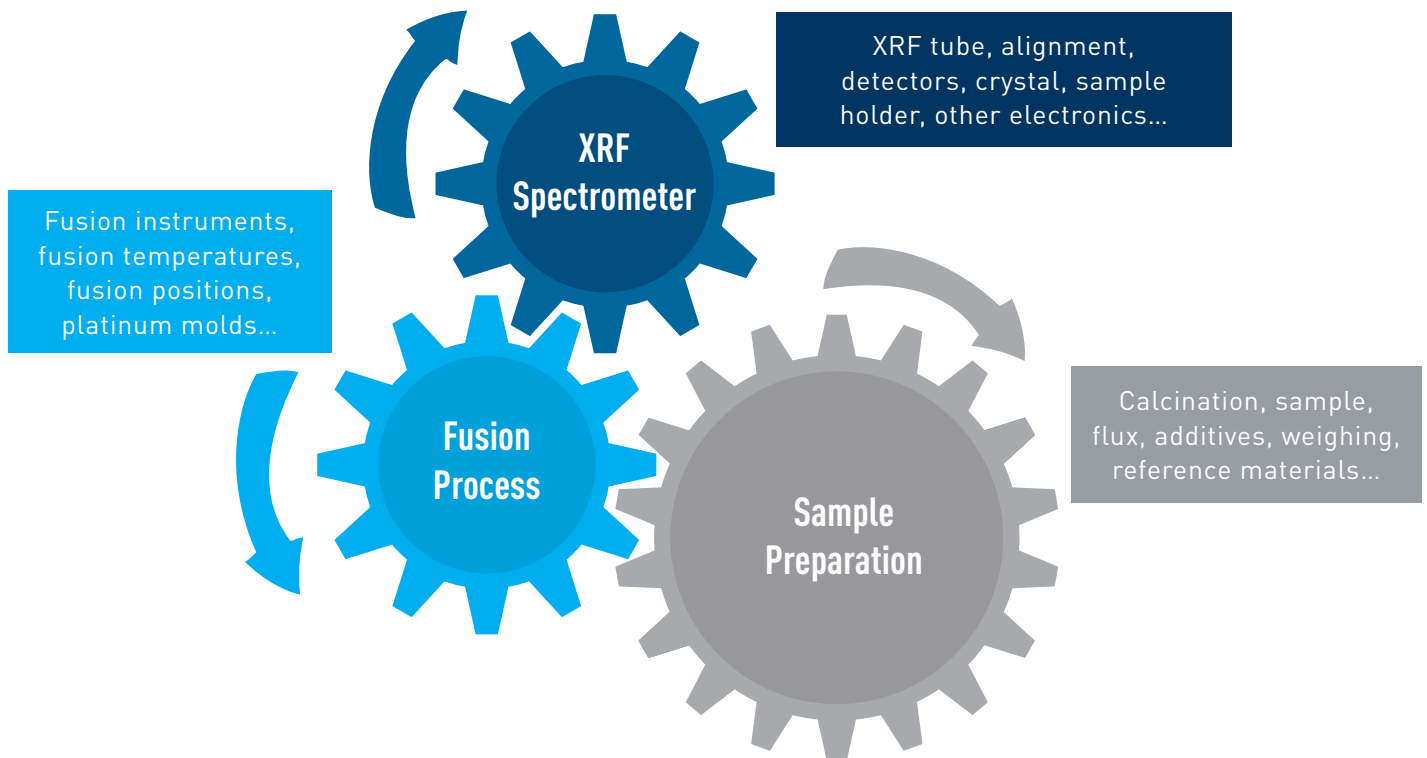
The Fusion Monitor™ chemical compound consists of homogeneous, fused and spherical glassy beads each composed of a lithium borate flux, a non-wetting agent and a stabilized matrix (cement for example). Since it is pre-fused in borate flux, the sample matrix is protected from chemical and physical effects that could alter its characteristics.

Being independent of the sample preparation step, the Fusion Monitor quality control product allows you to focus on the stability of the fusion process over time. Ready to use directly from the bottle, it will help you keep track of the platinum mold deterioration or temperature bias between different fusion instruments or fusion positions.

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of your fusion process



WHY USE THE FUSION MONITOR PRODUCT IN THE ROUTINE QUALITY CONTROL PROCESS?



All parts of the analytical Fusion–XRF process are linked together, as shown in this figure. The drift from one component influences the whole process and causes major errors in the analytical results.

Fusion-XRF analytical quality control monitoring tools	Sample Preparation Calcination, sample, flux, additives, weighing, reference materials...	Fusion Process Fusion instruments, fusion temperatures, fusion positions, platinum molds...	XRF Spectrometer XRF tube, alignment, detectors, crystal, sample holder, other electronics...
Quality control monitoring with control samples	← ??? Control samples ??? →		
Quality control monitoring with control samples and XRF drift monitors	← ??? Control samples ??? →		← XRF drift monitors →
Quality control monitoring with control samples, XRF drift monitors and the Fusion Monitor product	← Control samples →	← Fusion Monitor product →	← XRF drift monitors →

Control samples are ideal for the quality assessment of the overall Fusion-XRF analytical process. However, they do not allow the monitoring and diagnosis of the individual sources of variation: sample preparation, fusion process and XRF spectrometer.

XRF drift monitors are available to regularly monitor the XRF calibration curve and the XRF drift corrections. To improve the control procedure of the different parts of the analytical process, Claisse has developed the Fusion Monitor quality control compound. This product allows a quick, easy and proactive quality assessment and monitoring of the fusion process. Laboratory analysts can now combine the three complementary tools offered by Claisse to proactively monitor the whole Fusion-XRF analytical process.

WHY INVEST IN THE FUSION MONITOR CHEMICAL COMPOUND?

MINIMIZES OPERATIONAL DOWNTIME

- Helps to quickly identify the source of a problem when the control samples are outside of the specified range, thus saving time

MAINTAINS CONSISTENCY IN THE ANALYTICAL RESULTS

- Overlooks and corrects the analytical biases before they affect manufacturing and commercial decisions
- Identifies temperature biases between different fusion instruments and fusion positions
- Identifies the wear and tear of the platinumware, thus indicating when polishing or reshaping is necessary

PREVENTS INCOMING RESULT BIAS

- Detects biases coming from the fusion process and helps to proactively solve problems before the XRF results become unusable

EASY TO USE

- No need for highly-qualified personnel
- Can be used with any fusion instrument or flux brand, regardless of the composition used to prepare your samples
- No manipulation errors possible since there is no need to add any additives, to weigh the sample and flux and to calculate LOI

TECHNICAL SPECIFICATIONS

- Spherical vitreous beads
- Fused and homogeneous
- Dust-free
- High density: 1.4 g / cm³
- Available from stock
- High fluidity
- Granulometry: 100% < 500µm

CATALOG

F-C420-60	Fusion Monitor Type C LiT/LiM/LiBr/Sample C 45.23%/45.23%/0.45%/9.09%
F-1162-60	Fusion Monitor Type F LiT/LiM/LiBr/Sample F 45.23%/45.23%/0.45%/9.09%

Scan this QR code to obtain more information about the Fusion Monitor chemical compound



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