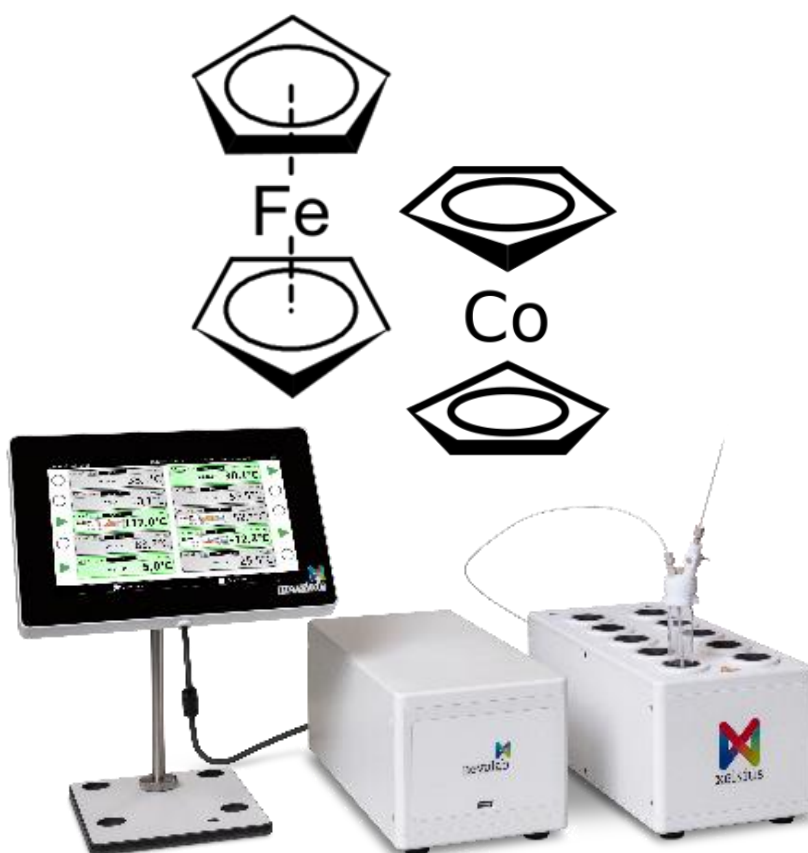


Crystallization of organometallic complexes



Keywords

Crystallization, Organometallic complexes

Summary

Crystallization of ruthenium-based organometallic compounds in anhydrous acetone medium.



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Equipment

ITEM	DESCRIPTION
8053 000 100	Xelsius basic unit
8053 000 201	Reflux condenser module
8053 000 207	5-Port-Reaction Cap config set & HV Vial
8053 000 204	Liquid Temperature Probe; Set of 5

Reagents

REAGENTS	
50 mmol	Organometallics Standard
20 ml	Anhydrous Acetone, CAS: 100-52-7

Procedure

The organometallics standard is dissolved in anhydrous acetone and left at 10°C for 2 days. The slow evaporation of the solvent produces crystals of appreciable size.

The slow precipitation of the complex is ensured by the low temperature, since in a solvent flow there is a risk of accelerating the precipitation times and not obtaining crystals that can be analyzed by means of diffractometric techniques.

Notes

Best results with Nitrogen flow: approx. 5 ml/min and no stirring

References:

Chemical structures page1: Source: https://en.wikipedia.org/wiki/Organometallic_chemistry
Data provided by: nevoLAB GmbH in cooperation with LabTech Srl, IT www.labtechsrl.com



About us

nevoLAB is a leading manufacturing company with skills and passion devoted to provide advanced quality tools and solutions to the chemical community. We are located in Maierhofen in Southgermany.

With knowledgeable scientists and experienced engineers, our R&D team has developed and released a series of new lab equipment and instruments dedicated to modern chemical labs laboratories.

The Xelsius System

A compact and fast reactor with 10 completely individually tempered and stirred reactor cells in the temperature range from -20°C to $+150^{\circ}\text{C}$.

The space-saving device for parallel synthesis, reaction and process optimization, as well as for DoE (Design of Experiment) studies. Replacement for ten heating cells, magnetic stirrers, ice baths, reactor cells and reflux condensers in only one device.

Save valuable space in the fume cupboard with clever and flexible solutions for operating and setting up the reactor.

Reaction Notes

Organic laboratories perform many different procedures during studies and research. Thanks to its flexibility, Xelsius system can cover all the daily needs of an organic laboratory in an efficient and multitasking way, boosting results by 10 times.

To guide you and help you during the lab implementation of Xelsius system, we created "Reaction Notes" as a simple and user-friendly collection of data and steps for the most common procedures in organic chemistry. Enjoy!

