

## GUM Workbench Version 2.3 screen views

### Budget view with multiple results

concentration of the replicate 1

Uncertainty Budget:

Quantity	Value	Standard Uncertainty	Distribution	Sensitivity Coefficient	Uncertainty Contribution	Index
$K_{\text{factor}}$	$1.1765 \cdot 10^{-6} \text{ g/g}$	$0.0235 \cdot 10^{-6} \text{ g/g}$	normal	5.4	$130 \cdot 10^{-9} \text{ g/g}$	5.4 %
$l_1$	5.350	0.110	normal	$1.2 \cdot 10^{-6}$	$130 \cdot 10^{-9} \text{ g/g}$	5.7 %
$\delta c_1$	0.0 g/g	$510 \cdot 10^{-9} \text{ g/g}$	normal	1.0	$510 \cdot 10^{-9} \text{ g/g}$	88.9 %
$c_1$	$6.294 \cdot 10^{-6} \text{ g/g}$	$0.541 \cdot 10^{-6} \text{ g/g}$				

Result:

Value:  $6.3 \cdot 10^{-6} \text{ g/g}$  Expanded Uncertainty:  $\pm 1.1 \cdot 10^{-6} \text{ g/g}$  Coverage Factor: 2 Coverage: manual

C:\Programme\GUM Workbench 2.3 demo\Budgets\Examples\Multiple Replicate Analysis.smu

### Result view

Result Correlation-Matrix

Quantity	Value	Expanded Uncertainty	Coverage-factor	Coverage
$c_1$	$6.3 \cdot 10^{-6} \text{ g/g}$	$1.1 \cdot 10^{-6} \text{ g/g}$	2.00	manual
$c_2$	$5.1 \cdot 10^{-6} \text{ g/g}$	$1.1 \cdot 10^{-6} \text{ g/g}$	2.00	manual
$c_3$	$6.8 \cdot 10^{-6} \text{ g/g}$	$1.1 \cdot 10^{-6} \text{ g/g}$	2.00	manual
$c_4$	$5.8 \cdot 10^{-6} \text{ g/g}$	$1.1 \cdot 10^{-6} \text{ g/g}$	2.00	manual
$c_{\text{avg}}$	$6.02 \cdot 10^{-6} \text{ g/g}$	$0.58 \cdot 10^{-6} \text{ g/g}$	2.00	manual
$\varepsilon_1$	$270 \cdot 10^{-9} \text{ g/g}$	$910 \cdot 10^{-9} \text{ g/g}$	2.00	manual
$\varepsilon_2$	$-900 \cdot 10^{-9} \text{ g/g}$	$900 \cdot 10^{-9} \text{ g/g}$	2.00	manual
$\varepsilon_3$	$820 \cdot 10^{-9} \text{ g/g}$	$910 \cdot 10^{-9} \text{ g/g}$	2.00	manual
$\varepsilon_4$	$-190 \cdot 10^{-9} \text{ g/g}$	$910 \cdot 10^{-9} \text{ g/g}$	2.00	manual

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### Correlation matrix of the results

GUM Workbench Pro - Multiple Replicate Analysis.smu

File Edit View Option Tools Help

Model Observation Correlation Budget Last Result

Result Correlation-Matrix

	c <sub>1</sub>	c <sub>2</sub>	c <sub>3</sub>	c <sub>4</sub>	c <sub>avg</sub>
c <sub>1</sub>	1	0.04	0.06	0.05	0.54
c <sub>2</sub>	0.04	1	0.05	0.04	0.52
c <sub>3</sub>	0.06	0.05	1	0.05	0.55
c <sub>4</sub>	0.05	0.04	0.05	1	0.53
c <sub>avg</sub>	0.54	0.52	0.55	0.53	1

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