The interaction parameters between the subgroups are

	Interaction energy, a_{mk}			
	$k=1$	$k=2$	$k=14$	$k=40$
$m=1$	0	0	986.5	597
$m=2$	0	0	986.5	597
$m=14$	156.4	156.4	0	6.712
$m=40$	24.82	24.82	185.4	0

For example, the interaction between subgroup "CH_3" ($k=1$) and subgroup "OH" ($k=14$) is $a_{1,14} = 986.15$ K.

This is all that is required from the UNIFAC tables. Below we summarize the results for the various intermediate variables ($i=1$ refers to ethanol, $i=2$ refers to acetonitrile):

	$(i=1)$	$(i=2)$
r	2.5755	1.8701
q	2.588	1.724
J	1.32714	0.963651
L	1.42952	0.952276

make subscripts "mk"

The τ_{mn} parameters are calculated as $\exp(-a_{mn}/T)$:

τ_{mn}

	$n=1$	$n=2$	$n=14$	$n=40$
$m=1$	1	1	0.60687	0.9238
$m=2$	1	1	0.60687	0.9238
$m=14$	0.0428415	0.0428415	1	0.553193
$m=40$	0.148609	0.148609	0.978794	1

change "n" to "k"

transpose table: first row should become first column, etc.

All other parameters are summarized below:

G_{ki}		s_{ki}			
$(i=1)$	$(i=2)$	$(i=1)$	$(i=2)$	θ_k	η_k
0.848	0	2.11624	1.59263	0.0848	1.64499
0.54	0	2.11624	1.59263	0.054	1.64499
1.2	0	1.25946	0.953705	0.12	0.98428
0.	1.724	1.38082	1.724	1.5516	1.68968

The combinatorial contributions are

$$\ln \gamma_1^C = -0.00925364, \quad \ln \gamma_2^C = -0.000066914,$$

and the residual contributions are

$$\ln \gamma_1^R = 0.7086, \quad \ln \gamma_2^R = 0.00920115.$$