

### Code snippet:

```
import csm_dataface, csm_notation
...
sNotation = "CCCCn1cn(C)ccl{!re=+}.{NTf2(1-)}" # [bmim][NTf2] string
oDataFace = csm_dataface.DataFace() # singleton object
oNotation = csm_notation.Notation(oDataFace) # initialize parser object
lstErrors = oNotation.parse(sNotation) # evaluate [bmim][NTf2]
if len(lstErrors) == 0: # check consistency
    sWorkNotation = oNotation.work_notation() # work notation
    sMFTotal = oNotation.mf_total() # molecular formula, total
    sMFCation = oNotation.mf_compnt(1) # molecular formula, cation
    sMFAnion = oNotation.mf_compnt(2) # molecular formula, anion
    lstAnionAtf0 = oNotation.atf0_compnt(2) # atom fragments, anion
    lstAnionDM = oNotation.dmat_compnt(2) # distance matrix, anion
```

### Content of assigned variables:

```
sWorkNotation =
  "CCCCn1cn(C)ccl{!re=+}.FC(F)(F)S(=O)(=O)[N-]S(=O)(=O)C(F)(F)F"
sMFTotal = "C10H15F6N3O4S2"
sMFCation = "C8H15N2(1+)"
sMFAnion = "C2F6NO4S2(1-)"
lstAnionAtf0 = ['F{-}', 'C{-}{-}{-}{-}', F{-}', 'F{-}',
  'S{=}{=}{-}{-}', 'O{=}', 'O{=}', '[N-]{-}{-}',
  'S{=}{=}{-}{-}', 'O{=}', 'O{=}', 'C{-}{-}{-}{-}',
  'F{-}', 'F{-}', F{-}']
lstAnionDM = [ 1, 2, 2, 2, 3, 3, 3, 4, 5, 5, 5, 6, 6, 6,
  1, 1, 1, 2, 2, 2, 3, 4, 4, 4, 5, 5, 5,
  2, 2, 3, 3, 3, 4, 5, 5, 5, 6, 6, 6,
  2, 3, 3, 3, 4, 5, 5, 5, 6, 6, 6,
  1, 1, 1, 2, 3, 3, 3, 4, 4, 4,
  2, 2, 3, 4, 4, 4, 5, 5, 5,
  2, 3, 4, 4, 4, 5, 5, 5,
  1, 2, 2, 2, 3, 3, 3,
  1, 1, 1, 2, 2, 2,
  2, 2, 3, 3, 3,
  2, 3, 3, 3,
  1, 1, 1,
  2, 2,
  2 ]
```

