## NAME

SplitSDFiles.pl - Split SDFile(s) into multiple SD files

## **SYNOPSIS**

SplitSDFiles.pl SDFile(s)...

SplitSDFiles.pl [-c, --CmpdsMode DataField | MolName | RootPrefix] [-d, --DataField DataFieldName] [-h, --help] [-m, --mode Cmpds | Files] [-n, --numfiles number] [-numcmpds number] [-o, --overwrite] [-r, --root rootname] [-w,--workingdir dirname] SDFile(s)...

## **DESCRIPTION**

Split SDFile(s) into multiple SD files. Each new SDFile contains a compound subset of similar size from the initial file. Multiple SDFile(s) names are separated by space. The valid file extensions are .sdf and .sd. All other file names are ignored. All the SD files in a current directory can be specified either by \*.sdf or the current directory name.

# **OPTIONS**

# -c, --CmpdsMode DataField | MolName | RootPrefix

This option is only used during *Cmpds* value of <-m, --mode> option with specified --numcmpds value of 1.

Specify how to generate new file names during *Cmpds* value of <-m, --mode> option: use *SDFile(s)* datafield value or molname line for a specific compound; generate a sequential ID using root prefix specified by -r, --root option.

Possible values: DataField | MolName | RootPrefix | RootPrefix. Default: RootPrefix.

For empty *MolName* and *DataField* values during these specified modes, file name is automatically generated using *RootPrefix*.

For *RootPrefix* value of -c, --CmpdsMode option, new file names are generated using by appending compound record number to value of -r, --root option. For example: *RootName* Cmd<RecordNumber>.sdf.

Allowed characters in file names are: a-zA-Z0-9\_. All other characters in datafield values, molname line, and root prefix are ignore during generation of file names.

## -d, --DataField DataFieldName

This option is only used during DataField value of <-c, --CmpdsMode> option.

Specify SDFile(s) datafield label name whose value is used for generation of new file for a specific compound. Default value: None.

## -h, --help

Print this help message.

# -m, --mode Cmpds | Files

Specify how to split SDFile(s): split into files with each file containing specified number of compounds or split into a specified number of files.

Possible values: Cmpds | Files. Default: Files.

For *Cmpds* value of -m, --mode option, value of --numcmpds option determines the number of new files. And value of -n, --numfiles option is used to figure out the number of new files for *Files* value of -m, --mode option.

# -n, --numfiles number

Number of new files to generate for each SDFile(s). Default: 2.

This value is only used during Files value of -m, --mode option.

## --numcmpds number

Number of compounds in each new file corresponding to each SDFile(s). Default: 1.

This value is only used during Cmpds value of -m, --mode option.

# -o, --overwrite

Overwrite existing files.

# -r, --root rootname

New SD file names are generated using the root: <Root>Part<Count>.sdf. Default new file names: <InitialSDFileName> Part<Count>.sdf. This option is ignored for multiple input files.

## -w,--workingdir dirname

Location of working directory. Default: current directory.

## **EXAMPLES**

To split each SD file into 5 new SD files, type:

```
% SplitSDFiles.pl -n 5 -o Sample1.sdf Sample2.sdf
% SplitSDFiles.pl -n 5 -o *.sdf
```

To split Sample1.sdf into 10 new NewSample\*.sdf files, type:

```
% SplitSDFiles.pl -m Files -n 10 -r NewSample -o Sample1.sdf
```

To split Sample1.sdf into new NewSample\*.sdf files containing maximum of 5 compounds in each file, type:

```
% SplitSDFiles.pl -m Cmpds --numcmpds 5 -r NewSample -o Sample1.sdf
```

To split Sample1.sdf into new SD files containing one compound each with new file names corresponding to molname line, type:

```
% SplitSDFiles.pl -m Cmpds --numcmpds 1 -c MolName -o Sample1.sdf
```

To split Sample1.sdf into new SD files containing one compound each with new file names corresponding to value of datafield MoIID, type:

```
% SplitSDFiles.pl -m Cmpds --numcmpds 1 -c DataField -d MolID
-o Sample1.sdf
```

# **AUTHOR**

Manish Sud <msud@san.rr.com>

## SEE ALSO

InfoSDFiles.pl, JoinSDFiles.pl, MolFilesToSD.pl, SDToMolFiles.pl

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