### 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

## **COPYRIGHT**

Copyright (C) 2022 Manish Sud. All rights reserved.

This file is part of MayaChemTools.

MayaChemTools is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.