

The `plimsoll` package \ominus

Version 1

Palle Jørgensen

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1 Introduction

This package provides support for the use of the Plimsoll symbol “ \ominus ” in \LaTeX .

2 Loading the package

```
\usepackage{plimsoll}
```

In math mode the Plimsoll symbol is available with the command `\plimsoll` command.

2.1 Options

sans Provides the use of a sans serif version of the Plimsoll symbol: \ominus .

This version of the symbol is available with `\plimsollsans` as well.

circ Make use of `\circ` for denoting the standard state instead of the Plimsoll symbol.
See section 3.

3 The standard mark

In chemistry the Plimsoll symbol is sometimes used for denoting values of functions of state in the standard state of a chemical agent. This could be the standard Gibbs energy G^\ominus .

Denoting the standard state is available in math mode with `\stst`. This is compatible with the command name suggested in the *The Comprehensive \LaTeX Symbol List*. An example of using the symbol is

`\Delta G\stst = \Delta H\stst - T \cdot \Delta S\stst`

yielding

$$\Delta G^\circ = \Delta H^\circ - T \cdot \Delta S^\circ \quad (1)$$

The package option `circ` redefines the `\stst` to use the `\circ` command instead of the `\plimsoll` command. This is officially recommended by IUPAC but is not used consequently. It appears to be a matter of taste. This package provides easy interchange between the two different choices.

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```
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% <https://www.gnu.org/licenses/>.
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{plimsoll}[2020/10/09 Plimsoll symbol LaTeX Support,
Palle Jorgensen. Version 1.]
\DeclareFontFamily{U}{plimsoll}{}
\DeclareFontShape{U}{plimsoll}{m}{n}{<->plimsoll}{}
\DeclareFontShape{U}{plimsoll}{m}{s}{<->plimsoll-sans}{}
\DeclareSymbolFont{plimsoll}{U}{plimsoll}{m}{n}
\DeclareSymbolFont{plimsoll-sans}{U}{plimsoll}{m}{s}
\DeclareMathSymbol\plimsollroman{0}{plimsoll}{"001}
\DeclareMathSymbol\plimsollsans{0}{plimsoll-sans}{"001}
\let\plimsoll\plimsollroman
\def\stst{^{\plimsoll}}

\DeclareOption{sans}{\let\plimsoll\plimsollsans}
\DeclareOption{circ}{\def\stst{^{\circ}}}
\ProcessOptions*

\endinput
```