Rocky Enterprise Linux 9.2 Manual Pages on command 'sinhf.3'

$ man sinhf.3

SINH(3)   Linux Programmer's Manual   SINH(3)

NAME

    sinh, sinhf, sinhl - hyperbolic sine function

SYNOPSIS

    #include <math.h>

    double sinh(double x);

    float sinhf(float x);

    long double sinhl(long double x);

    Link with -lm.

  Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

    sinhf(), sinhl():

       _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

          || /* Since glibc 2.19: */ _DEFAULT_SOURCE

          || /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE

DESCRIPTION

    These functions return the hyperbolic sine of x, which is defined mathematically as:

       sinh(x) = (exp(x) - exp(-x)) / 2

RETURN VALUE

    On success, these functions return the hyperbolic sine of x.

    If x is a NaN, a NaN is returned.

    If x is +0 (-0), +0 (-0) is returned.

    If x is positive infinity (negative infinity), positive infinity (negative infinity) is

    returned.

If the result overflows, a range error occurs, and the functions return HUGE_VAL, HUGE_VALF, or HUGE_VALL, respectively, with the same sign as x.

ERRORS

See math_error(7) for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Range error: result overflow

errno is set to ERANGE. An overflow floating-point exception (FE_OVERFLOW) is raised.

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

??

Interface	Attribute	Value
sinh(), sinhf(), sinhl()	Thread safety	MT-Safe

CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008.

The variant returning double also conforms to SVr4, 4.3BSD, C89.

SEE ALSO

acosh(3), asinh(3), atanh(3), cosh(3), csinh(3), tanh(3)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at https://www.kernel.org/doc/man-pages/.

2017-09-15   SINH(3)