Hello Bio, Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@hellobio.com



# **DATASHEET**

DMSO (Sterile-filtered)

### **Product overview**

Name DMSO (Sterile-filtered)

Cat No HB3262

Alternative names Methyl sulfoxide, Dimethyl Sulfoxide

**Purity** >99.9%

**Description** Widely used solvent. Improves direct differentiation of pluripotent stem cells and used as a stem cell

cryoprotectant

# **Biological Data**

**Biological description** Organic solvent widely used for dissolving lipophilic substances.

Commonly used as a cryototectant in cryopreservation of stem cells.

DMSO activates the retinoblastoma (Rb) protein and increases the proportion of cells in the early G1 phase of the cell cycle.

DMSO improves directed differentiation of many cell lines. DMSO increases the competency of pluripotent stem cells (in >25 different embryonic and induced pluripotent stem cell lines) to respond to differentiation signals, enhance differentiation across all germ layers and improve terminal differentiation into functional derivatives

Endotoxin < 0.05 I.E(EU)/mL

# **Solubility & Handling**

Storage instructions

Handling

Room temperature (desiccate)

This compound is light sensitive. We therefore recommend protecting the compound and solutions

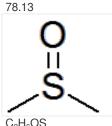
from light.

Important This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use.

#### **Chemical Data**

Chemical name Molecular Weight Chemical structure Dimethyl sulfoxide



Molecular Formula CAS Number PubChem identifier

C<sub>2</sub>H<sub>6</sub>OS 67-68-5 679 SMILES InChi InChiKey MDL number

**Appearance** 

CS(=0)C

InChl=1S/C2H6OS/c1-4(2)3/h1-2H3 IAZDPXIOMUYVGZ-UHFFFAOYSA-N

MFCD00002089 colourless liquid

## References

Cryopreservation of hematopoietic stem cells.

Berz et al (2007) Am J Hematol 82(6):

**PubMedID** 17266054

A simple tool to improve pluripotent stem cell differentiation.

Chetty et al (2013) Nat Methods 10(6)

**PubMedID** 23584186

A cost-effective system for differentiation of intestinal epithelium from human induced pluripotent stem cells.

Ogaki et al (2015) Sci Rep 30

**PubMedID** 26616277