



**Safety Data Sheet CryoSure-DMSO**  
in accordance to Regulation (EC) no.: 1907/2006 (REACH) and 1272/2008 (CLP)  
Date of issue/last revision: 10/2018

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier:**

Name: CryoSure-DMSO, Dimethyl Sulfoxide  
Cat. No.: WAK-DMSO-10, WAK-DMSO-50, WAK-DMSO-70  
CAS #: 67-68-5  
MF: C<sub>2</sub>H<sub>6</sub>O<sub>S</sub>  
EU No.: 200-664-3  
Molecular weight: 78.13 AMU

**1.2. Relevant identified uses of the substance or mixture and uses advised against:**

Cryoprotectant for the cryopreservation of human cells and tissues for transplantation

**1.3. Details of the supplier of the safety data sheet:**

WAK-Chemie Medical GmbH  
Siemensstr. 9  
61449 Steinbach/Ts  
Tel: +49 6171 2843 0  
Fax: +49 6171 695 646  
E-Mail: [info@wak-chemie.com](mailto:info@wak-chemie.com)

**Australian Distributor: Scientifix Pty Ltd**  
**F1/2A Westall Road**  
**Clayton, VIC 3168**  
**Phone: 03 8540 5900 / Fax: +613 9543 7827**  
**Web: [www.scientifix.com.au](http://www.scientifix.com.au)**

**1.4. Emergency phone:** 03 8540 5900  
(on weekdays during office hours, 9 am – 5 pm AEDT)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture:**

**2.1.1 Classification of the substance or mixture according to EC No 1272/2008:**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.2. Label elements according to EC No 1272/2008:**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.3. Other Hazards:**

None known.

**Section 3: Composition/information on ingredients**

**3.1. Substance:**

Name	CAS No./ EC No.	concentration value	Classification according to Regulation (EC) No. 1272/2008 (CLP)	REACH Registration no.:
Dimethyl Sulfoxide (DMSO)	67-68-5 / 200-664-3	≥ 99,9 %	Not classified	*

\* A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2. and 6. REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

**3.2. Mixture:**

This product is a substance.



#### **Section 4: First aid measures**

##### **4.1. Description of first aid measures:**

Eyes: Flush with running water for >15 minutes. Get medical attention if irritation develops.

Skin: Wash skin thoroughly with soap and water. Wash contaminated clothing before reuse. Get medical attention if irritation develops.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Inhalation: remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention symptoms appear.

##### **4.2. Most important symptoms and effects, both acute and delayed:**

No data available

##### **4.3. Indication of any immediate medical attention and special treatment needed:**

No data available

#### **Section 5: Firefighting measures**

##### **5.1. Extinguishing media:**

Adapt extinguishing measures to suit the environment.

Suitable extinguishing media: water, "alcohol" foam, dry chemical or carbon dioxide.

##### **5.2. Special hazards arising from the substance or mixture:**

Carbon oxides, Sulphur oxides.

##### **5.3. Advice for firefighters:**

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Section 6: Accidental release measures**

##### **6.1. Personal precautions, protective equipment and emergency procedures:**

Avoid all unnecessary exposure. Avoid breathing vapours, mist or gas. Remove all sources of ignition.

For non-emergency personnel: no additional information available

For emergency responders: no additional information available

##### **6.2. Environmental precautions:**

No additional information available.

##### **6.3. Methods and materials for containment and cleaning up:**

Take up liquid spill into inert absorbent material. Clean thoroughly. Clean with water.

##### **6.4. Reference to other sections:**

For disposal see section 13.

#### **Section 7: Handling and storage**

##### **7.1. Precautions for safe handling:**

Avoid all unnecessary exposure. Keep away from sources of ignition. No smoking.

##### **7.2. Conditions for safe storage, including any incompatibilities:**

Store at 20°C – 30°C.

##### **7.3. Specific end use(s):**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



**Section 8: Exposure controls/personal protection**

**8.1. Control parameters:**

ingredient	CAS-No	Value	Parameters to be monitored	Basis
Dimethyl sulfoxide	67-68-5	OELs	160 mg/m <sup>3</sup>	Germany: TRGS 900 Limit values in the air at the workplace

**8.2. Exposure controls:**

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Personal Protective Equipment**

Eyes: Wear chemical splash goggles.  
 Skin: Wear appropriate protective gloves to prevent skin exposure.  
 Clothing: Wear appropriate protective clothing to prevent skin exposure.  
 Respirators: Wear an appropriate approved air purifying respirator

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties:**

property	value	At temperature or pressure	other
pH:	8.5		
Initial boiling point and boiling range	189°C		
Melting point/freezing point	18,4°C		
Flash point	87°C		Closed cup
Flammability	N/A		
Autoignition temperature	301°C		
Oxidising properties	N/A		
Explosive limits	lower: 3.5 % Upper: 42 %	63 °C	
Vapour pressure	0.42 mmHg	20°C	
Specific Gravity:	1.1 g/cm <sup>3</sup>		
Partition coefficient: octanol/water	Log pO/W: -2,03		
Viscosity	0,002 Pas	20 °C	
Vapour density	2.7 g/l		
Vapor concentration:			
Evaporation rate	N/A		
Bulk density:	N/A		
Decomposition temperature	> 190 °C		
Solvent content:	N/A		
Water content:	N/A		
Surface tension:	N/A		
conductivity:	N/A		
Solubility in water:	completely miscible		
Other solvents:	Alcohol, Ethyl Ethers		

**9.2. Other information:**

No additional information available.



**Section 10: Stability and reactivity**

**10.1. Reactivity:**

No data available.

**10.2. Chemical stability:**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions:**

No data available.

**10.4. Conditions to avoid:**

Heat, flames and sparks.

**10.5. Incompatible materials:**

Acid chlorides, Phosphorus halides, Strong acids, Strong oxidizing agents, Strong reducing agents.

**10.6. Hazardous decomposition products:**

No data available.

**Section 11: Toxicological Information**

**11.1 Information on toxicological effects:**

Acute toxicity:	LD50 Oral - Rat - 14.500 – 28.300 mg/kg
Skin corrosion/irritation:	Mild skin irritation
Serious eye damage/eye irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available

**Section 12: Ecological information**

**12.1. Toxicity:**

Test type: LC50 Fish Species: Onchorhynchus mykiss Time: 96 h Value: 35,000 mg/l	Test type: EC 50 Algen Species: Lepomis macrochirus Time: 96 h Value: > 400,000 mg/l
Test type: EC 50 Daphnien Species: Daphnia pulex Time: 96 h Value: 27,500 mg/l	Test type: LC50 Fisch Species: Pimephales promelas Time: 96 h Value: 34,000 mg/l

**12.2. Persistence and degradability:**

31 % - substance is not readily biodegradable (OECD Test Guideline 301D).

**12.3. Bioaccumulative potential:**

Not data available.

**12.4. Mobility in soil:**

Not data available.

**12.5. Results of PBT and vPvB assessment:**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6. Other adverse effects**

Not data available.



**Section 13: Disposal considerations**

**13.1 Waste treatment methods:**

**13.1.1. Product/package disposal:**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**13.1.2 Waste treatment-relevant information:**

Not data available.

**13.1.3 Sewage disposal-relevant information:**

Not data available.

**13.1.4 Other disposal recommendations:**

Not data available.

**Section 14: Transport information**

14.1. UN class:	Not a hazardous substance or mixture.
14.2. Proper shipping name:	Not a hazardous substance or mixture.
14.3. Transport Hazard Class :	Not a hazardous substance or mixture.
14.4. Packing group:	Not a hazardous substance or mixture.
14.5. Environmental Hazard no.:	Not a hazardous substance or mixture.
14.6. Special precautions for end user:	see sections 6. and 8.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	not applicable

**Section 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Labelling according EC No 1272/2008

**15.2. Chemical safety assessment:**

A chemical safety assessment is not required.

**Section 16: Other information**

**16.1 Indication of changes**

See sections: 1, 3 and 16.

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**16.2 Legend:**

CAS: Chemical Abstract Service Number  
IBC-Code: The International Building Code (IBC) is a model building code developed by the International Code Council (ICC).  
LC: lethal concentration  
LD: lethal dose  
log Kow: The ratio of the concentration of a solute between water and octanol  
MARPOL: International Convention for the Prevention of Pollution from Ships  
PBT: Persistent, bioaccumulative and toxic  
RID: Convention concerning International Carriage by Rail  
UN: United Nations  
vPvB: very persistent and very bioaccumulative



**16.3. References and data sources:**

**Regulation:**

REACH- Regulation (EC) No. 1907/2006

CLP-Regulation (EC) No. 1272/2008

Regulation (EC) No. 2015/830

**Internet:**

[www.reach-clp-biozid-helpdesk.de](http://www.reach-clp-biozid-helpdesk.de)

<https://echa.europa.eu>

<http://www.reach-info.de>

**16.4 Methods according to Article 9 of the Regulation (EC) No 1272/2008 of the evaluation of data for classification purposes:**

Classification in accordance with Regulation (EC) No 1272/2008, Annex VII (Conversion table)

**16.5. Hazard statements**

Not data available.

**16.6 Training advice**

For activities with this substance= no training required.

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