

Printing date 29.01.2024 Version number 1 Revision: 29.01.2024

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

· Product identifier

· Trade name: CFSE

· Article number: CS1-P0002-1 Component A

· Relevant identified uses of the substance or mixture and uses advised against

· Product category PC21 Laboratory chemicals

· Application of the substance / the mixture Laboratory chemicals

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Revvity Lawrence Mfg Site

360 Merrimack St

LAWRENCE, MA 01843

USA

· Further information obtainable from:

US Tech Support

(978) 327-5340

Email:

CellC-Support@REVVITY.com

• Emergency telephone number: +1-(978)-327-5340 (8:30 AM - 5:00 PM EST ,M-F)

SECTION 2: Hazards identification

- · Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

 The product is not classified, according to the CLP regulation.
- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- ·Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components: No Hazardous Components

· Non-hazardous con	iponents
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150347-59-4 5(6)-CFDA, SE (5-(and-6)-carboxyfluorescein diacetate, succinimidyl ester)

>50-≤100%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

- EU

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SECTION 4: First aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Dispose of the material collected according to regulations.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- · Precautions for safe handling No special measures required.
- · Information about fire and explosion protection: No special measures required.
- Conditions for safe storage, including any incompatibilities
- · Storage: Store 2 8°C
- · Specific end use(s) Reserach Use Only

SECTION 8: Exposure controls/personal protection

- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Appropriate engineering controls No further data; see section 7.

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- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · Respiratory protection: Not required.
- · Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Not required.

SECTION 9: Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

Colour:
 Odour:
 Odour threshold:
 Melting point/freezing point:

Colourless

 Characteristic
 Not determined.
 Undetermined.

· Boiling point or initial boiling point and boiling

range Undetermined.
• Flammability Not applicable.

Lower and upper explosion limit

Lower: Not determined.
 Upper: Not determined.
 Flash point: Not applicable.
 Decomposition temperature: Not determined.
 pH Not determined.

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

Solubility

• water:
• Partition coefficient n-octanol/water (log value)
• Vapour pressure:

Fully miscible.

Not determined.

Not determined.

· Density and/or relative density

Density: Not determined.
Relative density Not determined.
Vapour density Not determined.

- · Other information
- · Appearance:

· Form: Not determined.

· Important information on protection of health and environment, and on safety.

• **Ignition temperature:** Product is not selfigniting.

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Explosive properties:	Product does not present an explosion hazard.
Solvent content:	•
Solids content:	<5.0 %
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical hazard	classes
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flamma	able
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · **Incompatible materials:** No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

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· Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- · Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

- · Waste treatment methods
- · Recommendation

Smaller quantities can be disposed of with household waste.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

· UN number or ID number		
· ADR, IMDG, IATA	not regulated	
· UN proper shipping name		
· ADR, IMDG, IATA	not regulated	
· Transport hazard class(es)		
· ADR, ADN, IMDG, IATA		
Class	not regulated	
· Packing group		
· ADR, IMDG, IATA	not regulated	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	

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Maritime transport in bulk according to IMO

instruments Not applicable.

· UN "Model Regulation": not regulated

SECTION 15: Regulatory information

- · Directive 2004/42/EC
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: -
- · Date of previous version: 20.03.2023
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.



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

- · Product identifier
- · Trade name: Anhydrous DMSO
- · Article number:

CSK-V0019-1 Component C, CSK-V0022-1 Component C, CS1-P0002-1 Component B, CSK-V0023-1 Component J, CSK-V0024-1 Component J, CSK-V0016-1 Component B

· CAS Number:

67-68-5

· EC number:

200-664-3

- · Relevant identified uses of the substance or mixture and uses advised against
- · Product category PC21 Laboratory chemicals
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity Lawrence Mfg Site 360 Merrimack St

LAWRENCE, MA 01843

USA

· Further information obtainable from:

US Tech Support (978) 327-5340

Email:

CellC-Support@REVVITY.com

· Emergency telephone number: +1-(978)-327-5340 (8:30 AM - 5:00 PM EST, M-F)

SECTION 2: Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

STOT SE 2 H371 May cause damage to organs.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labelling: dimethyl sulfoxide

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Trade name: Anhydrous DMSO

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· Hazard statements

H371 May cause damage to organs.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- ·Substances
- · CAS No. Description

67-68-5 dimethyl sulfoxide

- **Identification number(s)**
- **EC number:** 200-664-3

SECTION 4: First aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

· Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.

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Trade name: Anhydrous DMSO

· Environmental precautions:

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Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about fire and explosion protection: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- **Storage:** Store at (-16°C) (-24°C)
- · Specific end use(s) Reserach Use Only

SECTION 8: Exposure controls/personal protection

- · Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Goggles recommended during refilling

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Trade name: Anhydrous DMSO

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SECTION 9: Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Odourless
Odour threshold:
Melting point/freezing point:
18.45 °C

· Boiling point or initial boiling point and boiling

range 189 °C (67-68-5 dimethyl sulfoxide)

· Flammability Not applicable.

· Lower and upper explosion limit

Lower:
Upper:
63 Vol % (67-68-5 dimethyl sulfoxide)
Flash point:
Auto-ignition temperature:
1.8 Vol % (67-68-5 dimethyl sulfoxide)
63 Vol % (67-68-5 dimethyl sulfoxide)
95 °C (67-68-5 dimethyl sulfoxide)
270 °C (67-68-5 dimethyl sulfoxide)

Decomposition temperature:pHNot determined.Not determined.

· Viscosity:

• Kinematic viscosity
• Dynamic at 20 °C:

Not determined.
198 mPas

·Solubility

• water: Fully miscible.
• Partition coefficient n-octanol/water (log value) Not determined.

· Vapour pressure at 20 °C: 2.5 hPa (67-68-5 dimethyl sulfoxide)

· Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Not determined.
 Not determined.

· Other information

· Appearance:

• Form: Fluid
• Important information on protection of health and

environment, and on safety.

• **Ignition temperature:** Not determined.

• Explosive properties: Product does not present an explosion hazard.

· Solvent content:

 · Organic solvents:
 100.0 %

 · VOC (EC)
 100.00 %

 · Solids content:
 0.0 %

 · Molecular weight
 78.13 g/mol

· Change in condition

· Evaporation rate Not determined.

· Information with regard to physical hazard classes

· Explosives Void · Flammable gases Void · Aerosols Void Void · Oxidising gases · Gases under pressure Void · Flammable liquids Void · Flammable solids Void Void · Self-reactive substances and mixtures

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· Pyrophoric liquids	Void	
· Pyrophoric solids	Void	
Self-heating substances and mixtures	Void	
· Substances and mixtures, which emit flamm	able	
gases in contact with water	Void	
· Oxidising liquids	Void	
Oxidising solids	Void	
Organic peroxides	Void	
· Corrosive to metals	Void	
· Desensitised explosives	Void	

SECTION 10: Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

67-68-5 dimethyl sulfoxide

Oral LD50 14,500 mg/kg (rat)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure May cause damage to organs.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · Information on other hazards
- · Endocrine disrupting properties

Substance is not listed.

SECTION 12: Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

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Trade name: Anhydrous DMSO

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- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- · Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

HP5 | Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information		
· UN number or ID number · ADR, IMDG, IATA	not regulated	
· UN proper shipping name · ADR, IMDG, IATA	not regulated	
· Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
Packing group ADR, IMDG, IATA	not regulated	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
Maritime transport in bulk according instruments	g to IMO Not applicable.	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

- · Directive 2004/42/EC
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.

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· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

Substance is not listed.

· Regulation (EC) No 273/2004 on drug precursors

Substance is not listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: -
- · Date of previous version: 20.03.2023
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

STOT SE 2: Specific target organ toxicity (single exposure) – Category 2

* Data compared to the previous version altered.

EU