



SAFETY DATA SHEET CCCP REAGENT

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

1.1. Product identifier

Product name CCCP REAGENT

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

Identified uses For research use only.

1.3. Details of the supplier of the safety data sheet

Supplier Web: www.bio-rad-antibodies.com
Bio-Rad
Endeavour House
Langford Business Park
Kidlington
Oxford
OX5 1GE
antibody_safetydatasheets@bio-rad.com

Contact person Technical Services Manager

1.4. Emergency telephone number

Emergency telephone +1 7037415970 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332

Environmental hazards Not Classified

Human health This product is harmful if swallowed.

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H332 Harmful if inhaled.

Precautionary statements P261 Avoid breathing vapour/ spray.
P271 Use only outdoors or in a well-ventilated area.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTRE/doctor if you feel unwell.

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Contains [(3-CHLOROPHENYL)HYDRAZONO]MALONONITRILE

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

[(3-CHLOROPHENYL)HYDRAZONO]MALONONITRILE	1-5%
CAS number: 555-60-2	EC number: 209-103-7
Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 3 - H301	T;R23/24/25. Xi;R36/37/38.
Acute Tox. 3 - H311	
Acute Tox. 2 - H330	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
STOT SE 3 - H335	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If throat irritation or coughing persists, proceed as follows. Get medical attention. Show this Safety Data Sheet to the medical personnel.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention. Show this Safety Data Sheet to the medical personnel.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Irritation of nose, throat and airway.
Ingestion	This product is harmful if swallowed.
Skin contact	Skin irritation.
Eye contact	May cause severe eye irritation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Water spray, dry powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

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Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m ³ . Oxides of carbon. Oxides of nitrogen.
5.3. Advice for firefighters	
Protective actions during firefighting	No specific firefighting precautions known.
Special protective equipment for firefighters	Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid inhalation of spray mist and contact with skin and eyes. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Absorb spillage with non-combustible, absorbent material. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid spilling. Avoid contact with skin and eyes. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep only in the original container. Store at specified temperature. Refer to product label.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment



Appropriate engineering controls	Provide adequate ventilation.
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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.
Hygiene measures	Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow.
Odour	No characteristic odour.
Melting point	170°C
Initial boiling point and range	°C @ 7.2
Flash point	Not applicable.
Evaporation rate	Not determined.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not determined.
Oxidising properties	Not determined.

9.2. Other information

Other information	None.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No data available.
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10.2. Chemical stability

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Stability No data available.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong bases. Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x). Hydrogen chloride (HCl). Hydrogen cyanide (HCN).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects IARC Not Listed.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 14,500.0

Species Rat

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

ATE dermal (mg/kg) 30,000.0

Acute toxicity - inhalation

ATE inhalation (gases ppm) 10,000.0

ATE inhalation (vapours mg/l) 50.0

ATE inhalation (dusts/mists mg/l) 5.0

Skin corrosion/irritation

Human skin model test Not determined.

Extreme pH 7.2

Germ cell mutagenicity

Genotoxicity - in vitro Not determined.

Genotoxicity - in vivo Not determined.

Carcinogenicity

Carcinogenicity Not determined.

Reproductive toxicity

Reproductive toxicity - fertility Not determined.

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Specific target organ toxicity - single exposure

STOT - single exposure Not determined.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not determined.

Aspiration hazard

Aspiration hazard Not determined.

General information DMSO. May be absorbed through the skin. Knowledge about health hazard is incomplete.

Inhalation May cause respiratory system irritation.

Ingestion Harmful if swallowed.

Skin contact Irritating to skin.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

Route of exposure Ingestion. Skin and/or eye contact

Toxicological information on ingredients.

DIMETHYL SULFOXIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 14,500.0
mg/kg)

Species Rat

ATE oral (mg/kg) 14,500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 5,000.0
mg/kg)

Species Rabbit

ATE dermal (mg/kg) 5,000.0

SECTION 12: Ecological Information

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 34000 mg/l, Pimephales promelas (Fat-head Minnow)
LC50, 96 hours: 35000 mg/l, Oncorhynchus mykiss (Rainbow trout)
LC₅₀, 96 hours: mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

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Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Road transport notes Not classified.

Rail transport notes Not classified.

Sea transport notes Not classified.

Air transport notes Not classified.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

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EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance Workplace Exposure Limits EH40.
Approved Classification and Labelling Guide (Sixth edition) L131.
Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	Only trained personnel should use this material.
Revision date	27/11/2019
Revision	7
Supersedes date	27/11/2019
SDS number	10479
Risk phrases in full	R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R36/37/38 Irritating to eyes, respiratory system and skin. R36/38 Irritating to eyes and skin. R20 Harmful by inhalation. R41 Risk of serious damage to eyes.
Hazard statements in full	H301 Toxic if swallowed. H311 Toxic in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H330 Fatal if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.