

SAFETY DATA SHEET

Complement C4d

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product identifier

PRODUCT NAME:	Complement C4d
Product code	COMPL C4D RUO (all reagents in Complement C4d, except H ₂ SO ₄ Stop Solution)

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

Use of the product	Elisa kit for in vitro analytical applications
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1.3 Details of the supplier of the safety data sheet

Company	Euro Diagnostica AB
Address	Lundavägen 151
Zip code/Place	SE-212 24 Malmö, Sweden
Telephone	+46 40 53 76 00
Internet	www.eurodiagnostica.com
E-mail	info@eurodiagnostica.se

1.4 Emergency telephone number

Emergency telephone number	(Sweden) Acute: 112 – Ask for "Giftinformation". If less acute call: +46 010 4566700. (UK) NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): 08454 24 24 24
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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to the Regulation (EC) No. 1272/2008 (CLP): Skin Sens. 1;H317

2.2 Label elements



Warning

Contain:	Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
H317:	May cause an allergic skin reaction.
P280:	Wear protective gloves.
P333+P313:	If skin irritation or rash occurs: Get medical advice/attention.

2.3 Other hazards

Other hazards which do not result in classification	-
Substance meets the criteria for PBT under Regulation EC No. 1907/2006, appendix XIII	PBT: No
Substance meets the criteria for PBT under Regulation EC No. 1907/2006, appendix XIII	vPvB: No

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.2. Mixtures: Solutions containing the following declarable preservative:

No	Product/ingredient name	EC-number	CAS-number	REACH registration number	Conc. (weight-%)	Classification Regulation (EC) No. 1272/2008 [CLP]
	CMI/MI* (Index No.: 613-167-00-5)	-	55965-84-9	-	0.0025-0.025	Skin Corr. 1A;H314 Skin Sens. 1;H317 Acute Tox. 3;H301+H311+H331 Eye Dam. 1;H318 Resp. Sens. 1;H334 Aquatic Acute 1;H400 Aquatic Chronic 1;H410

* CMIT/MIT =

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

See section 16 for the full text of the H-phrases declared above.

SECTION 4: FIRST-AID MEASURES
4.1 Description of first aid measures

Inhalation:	Remove to fresh air, rest. Call a physician if the complaints persist.
Skin contact:	Remove contaminated clothing and wash skin with water and mild soap. If irritation persists: seek medical advice.
Eye contact:	Keep eyelids well apart. Rinse with water for a couple of minutes. Call a physician if the complaints persist.
Ingestion	Wash mouth properly with water. If victim is conscious and alert, give 2-4 cupfuls of milk/water to dilute the substance in stomach. Call a physician if the complaints persist.

4.2 Most important symptoms and effects, both acute and delayed
Potential acute health effects

Inhalation/Skin/ Eye/Ingestion:	Skin contact may cause an allergic skin reaction. Exposure to high airborne concentrations, may cause irritation, dizziness and sickness. Ingestion of larger amounts may cause sickness and vomiting.
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4.3 Indication of any immediate medical attention and special treatment needed

Ingestion:	Treat symptomatically.
Specific treatments:	In case of unconsciousness: Seek medical advice immediately. Show this safety data sheet to a physician or emergency ward.

SECTION 5: FIREFIGHTING MEASURES
5.1 Extinguishing media

Suitable extinguishing media	Dry chemical, foam, water spray or carbon dioxide.
Unsuitable extinguishing media	Waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	None.
Hazardous thermal decomposition products	None. Not combustible.

5.3 Advice for firefighters

Special protective actions for fire-fighters	Not applicable.
Special protective equipment for firefighters	Use breathing apparatus with an independent source of air.
Further information	Not applicable.

SECTION 6: ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up. Alternatively absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

Reference to other sections	See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.
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SECTION 7: HANDLING AND STORAGE
7.1 Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Wash promptly if skin becomes contaminated. Change contaminated clothes. After work, wash hands with water and mild soap. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage:	Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10), food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Further information:	Not applicable

7.3 Specific end use(s)

Reagent for in vitro diagnostic use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters
Occupational exposure limits:

Chemical name	European Union	United Kingdom	France	Spain	Germany
CMI/MI (CAS No. 55965-84-9)	None.	None.	None.	None.	None.
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
CMI/MI (CAS No. 55965-84-9)	None.	None.	None.	None.	None.
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
CMI/MI (CAS No. 55965-84-9)	None.	None.	None.	None.	None.

Recommended monitoring procedures	Not relevant
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Derived effect levels

Product/ingredient name	Type	Exposure	Value	Population	Effects
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Predicted effect concentrations	Not available
PNEC Summary	Not available

8.2 Exposure controls

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Otherwise, use local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory protection	Not relevant during normal condition. In case of inadequate ventilation use an approved mask (EN140) with particlefilter type P2. The filter has a limited lifetime and must be changed. Read the instruction.
Eye/face protection	Safety glasses or face shield (EN166) shall be worn.
Hand protection	Chemical-resistant, impervious gloves in neoprene rubber, butyl rubber or nitril rubber complying with an approved standard (EN374) shall be worn.
Body protection	Wear suitable protective clothing.
Environmental exposure controls	Not applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	n.d
Odour	n.d
Odour threshold	n.a
Solubility(ies)	Soluble in water
pH (product)	n.d
Melting point/freezing point	n.d
Initial boiling point and boiling range	n.d
Flash point	n.a

Evaporation rate (butyl acetate = 1)	n.d
Flammability (solid, gas)	n.a
Upper/lower flammability or explosive limits	n.a
Combustion rate	n.a
Upper/lower flammability or explosive limits	n.a
Vapour pressure (at 20°C)	n.d
Vapour density	n.a
Relative density (Water = 1)	n.d
Partition coefficient (n-octanol/water):	n.a
Autoignition temperature	n.d
Decomposition temperature	n.d
Viscosity	n.d
Explosive properties	n.a
Oxidising properties	n.a

n.a = not applicable. n.d = not determined

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Non-reactive
10.2 Chemical stability	Stabile under normal conditions of use and storage.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	Heating and direct sunlight.
10.5 Incompatible materials	Contact with acids liberates very toxic gas. Reacts with metals.
10.6 Hazardous decomposition products	Primarily Carbon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Hazard class	Data	Test	Data source
Inhalation	LC ₅₀ (rat) = > 4,62 mg/l/4h (CMI/MI)	No info	EU Biocide
Dermal	LD ₅₀ (rabbit) = 660 mg/kg (CMI/MI)	No info	EU Biocide
Oral	LD ₅₀ (rat) = 53 mg/kg (CMI/MI)	No info	RTECS
Corrosion/irritation:	Skin and eye corrosion, rabbit (CMI/MI)	Draize	IUCLID
Sensitization:	Skin sensitising (CMI/MI)	Buehler	EU Biocide
CMR:	No available or applicable data.	-	-

Sensitization by inhalation/skin contact

Contact with skin may cause sensitization. Symptoms are redness, swelling and itching.

Germ cell mutagenicity

Insufficient data.

Carcinogenicity

The chemical structure does not indicate any carcinogenic effects.

Reproduction toxicity

The chemical structure does not indicate any reproduction toxic effects.

Developmental toxicity

The chemical structure does not indicate any teratogenic effects.

Specific target organ toxicity (single exposure)

STOT assessment single dos toxicity:

Based on available information an organ specific toxicity is not expected for this mixture.

Repeated dose toxicity and specific organ toxicity (repeated exposure)

Based on available information an organ specific toxicity is not expected for this mixture.

SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity
12.1.1 Acute toxicity in the aquatic environment for CMI/MI

Test	Value/unit (mg/l)	Test method	Exp. time (h)	Species
Fish LC ₅₀	0.19	--	96	Salmo gairdneri
Daphnia EC ₅₀	0.028	--	48	Crassostrea virg.
Algae EC ₅₀	0.018	--	96	Selenastrum cap.

12.2 Persistence and degradability

Conclusion/Summary	CMI/MI is not rapidly degradable.
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12.3 Bioaccumulative potential

Conclusion/Summary	CMI/MI: Log K _{ow} > 5 (significant bioaccumulation).
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12.4 Mobility in soil

Soil/water partition coefficient (K_{oc})	No data.
Mobility	No data.

12.5 Results of PBT and vPvB assessment

PBT	Not applicable
vPvB	Not applicable

12.6 Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods

Method of disposal	The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Hazardous waste	Within the present knowledge of the supplier, this product is regarded as hazardous waste.

European Waste Catalogue (EWC)

EWC Waste Code	Type of waste
16 05 08	Chemicals consisting of or containing dangerous substances
15 02 02	Absorbent material containing residues of or contaminated by dangerous substances

Packaging

Method of disposal	Incineration.
Special precautions	None.

SECTION 14: TRANSPORT INFORMATION

 Product classified as dangerous goods: Yes No Not decided

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	--	--	--	--
14.3 Transport hazard class(es)	--	--	--	--
14.4 Packing Group	--	--	--	--
14.5 Environmental hazards	--	--	--	--
14.6 Special precautions for user	Not available	Not available	Not available	Not available
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	-			

SECTION 15: REGULATORY INFORMATION
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Must not be used by persons under 18 years of age.

EU Regulation (EC) No. 1907/2006 (REACH)

REACH Status	In compliance. Pre-registration status: All components are listed or exempted.
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Annex XIV - List of substances subject to authorization
Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

15.2 Chemical Safety Assessment

No CSR.

15.3 Other information

Tariff Code harmonized system	Not applicable
The EU Seveso Directive	Not applicable

International regulations

Chemical Weapons Convention List Schedule I Chemicals	Chemical Weapons Convention List Schedule II Chemicals	Chemical Weapons Convention List Schedule III Chemicals
Not regulated	Not regulated	Not regulated

SECTION 16: OTHER INFORMATION**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II**

Disclaimer: The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties, protections and disposal which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.

THE PRODUCER'S NOTES

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LIST OF HAZARD STATEMENTS MENTIONED UNDER SECTION 3

No.	H-Statements
H301+311+331	Toxic if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Other information

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.