

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 Complement C4d Flexi Capture antibody Complement C4d Flexi Detection antibody Complement Flexi Diluent Complement C4d Flexi Calibrator stock Complement C4d Flexi Low control Complement C4d Flexi High control
Product code	COMPL C4D RUO (all reagents in Complement C4d, except H2SO4 Stop Solution) FX1342 (no declarable substances/mixtures, exempted from remainder of SDS) FX1343 (no declarable substances/mixtures, exempted from remainder of SDS) FX1344 FX1345 FX1346 FX1347

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

Use of the product	COMPL C4D RUO: Kit for in vitro analytical applications. FX1342-FX1347: Reagents for in vitro analytical applications.
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1.3 Details of the Supplier of the safety data sheet

Company	Svar Life Science AB
Address	Lundavägen 151
Zip code/Place	SE-212 24 Malmö, Sweden
Telephone	+46 40 53 76 00
Website	www.svarlifescience.com
E-mail	info@svarlifescience.com

1.4 Emergency telephone number

Emergency telephone number	Sweden Giftinformationscentralen/ Swedish Poisons Information Centre: +46 010 456 6700 (In case of emergency dial 112)
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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

3.1 Substances

Not applicable.

3.2 Mixtures

The products listed under section 1.1 contain the following declarable preservative unless specified otherwise.

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

* CMI/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 contact may cause an allergic skin reaction. Exposure to high airborne concentrations, may cause irritation, dizziness and sickness.
Skin contact:	Not relevant.
Eye contact:	Not relevant.
Ingestion:	Ingestion of larger amounts may cause sickness and vomiting.

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. FIRE-FIGHTING 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 Decomposition products may include the following materials: carbon monoxide, carbon dioxide and nitrous gases.

5.3 Advice for firefighters

Special protective actions for fire-fighters Not applicable.

Special protective equipment for fire-fighters 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 spilt 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 if water-soluble. Alternatively, or if water-insoluble, 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 noncombustible, 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

See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

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)

Reagents for Research Use Only.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits

Chemical name	EU	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 procedure Not relevant

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 of the reagents

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

Not applicable

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 Condition 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

Assessment of acute toxicity for the different reagents: Not harmful if inhaled. Not harmful in contact with skin. Not harmful if swallowed.

Calculated data:

LD₅₀ oral, rat: > 2000 mg/kg

LD₅₀ dermal, rat: > 2000 mg/kg

Irritation/Corrosion

Assessment of irritating effect for the different reagents

Experimental/calculated data: Corrosive or irritating to the skin, rabbit: Not irritating.

Serious eye damage/eye irritation, rabbit: Not irritating

Sensitization by inhalation/skin contact

Assessment of sensibility for the different reagents: May not cause any sensitizing effects.

Germ cell mutagenicity

Assessment of mutagenicity for the different reagents: The chemical structure of the different reagents doesn't indicate any mutagenic effects.

Carcinogenicity

Assessment of carcinogenicity for the different reagents: The chemical structure of the different reagents doesn't indicate any carcinogenic effects.

Reproduction toxicity

Assessment of reproduction toxicity for the different reagents:

The chemical structure of the different reagents doesn't indicate any reproduction toxic effects.

Developmental toxicity

Assessment of teratogenicity for the different reagents:

The chemical structure of the different reagents doesn't 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 the different reagents.

Repeated dose toxicity and specific organ toxicity (repeated exposure)

Based on available information an organ specific toxicity is not expected for the different reagents.

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.
Algea EC ₅₀	0.018	--	96	Selenastrum cap.

12.2 Persistence and degradability

Conclusion/Summary CMI/MI is not rapidly degradable

12.3 Bioaccumulative potential

Conclusion/Summary CMI/MI: Log K_{ow} > 5 (significant bioaccumulation).

12.4 Mobility in soil

Soil/water partition coefficient (KOC) Not available

Mobility Not available

12.5 Results of PBT and vPvB assessment

PBT Not applicable
 vPvB Not applicable

12.6 Summary – ecological information

Conclusion None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

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, as defined by EU Directive 2008/98/EC.

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.

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

Not regulated

Chemical Weapons Convention List

Schedule II Chemicals

Not regulated

Chemical Weapons Convention List

Schedule III Chemicals

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.