



MATERIAL SAFETY DATA SHEET
CHORUS POSITIVE CONTROL SERA
FOR INFECTIOUS DISEASES
(According to Regulation (EC) No. 1907/2006 and 453/2010)

Edition: 2
Date: 17-Mar-2017
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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIERS

Product name:

POSITIVE CONTROL SERA

Product number:

Product	REF
Chorus Cytomegalovirus IgG Control Serum	81500
Chorus Cytomegalovirus IgG Avidity Control Serum	81501
Chorus Cytomegalovirus IgM Control Serum	81502
Chorus Epstein-Barr VCA IgG Control Serum	81503
Chorus Epstein-Barr VCA IgM Control Serum	81504
Chorus Epstein-Barr EBNA IgG Control Serum	81505
Chorus Epstein-Barr Early Antigen IgG Control Serum	81506
Chorus Epstein-Barr Early Antigen IgM Control Serum	81507
Chorus Helicobacter Pylori IgG Control Serum	81508
Chorus Helicobacter Pylori IgA Control Serum	81509
Chorus HSV 1 Control Serum	81510
Chorus Herpes Simplex 1+2 IgG Control Serum	81512
Chorus Herpes Simplex 1+2 IgM Control Serum	81513
Chorus Measles IgG Control Serum	81517
Chorus Mumps IgG Control Serum	81519
Chorus Mumps IgM Control Serum	81520
Chorus Mycoplasma pneumoniae IgG Control Serum	81521
Chorus Mycoplasma pneumoniae IgM Control Serum	81522
Chorus Rubella IgG Control Serum	81523
Chorus Rubella IgG Avidity Control Serum	81524
Chorus Rubella IgM Control Serum	81525
Chorus Syphilis Screen Recombinant Control Serum	81526
Chorus Toxoplasma IgG Control Serum	81531
Chorus Toxoplasma IgG Avidity Control Serum	81532
Chorus Toxoplasma IgM Control Serum	81533
Chorus Toxoplasma IgA Control Serum	81534
Chorus Treponema IgG Control Serum	81527
Chorus Treponema IgM Control Serum	81528
Chorus Varicella IgG Control Serum	81535
Chorus Varicella IgM Control Serum	81536
Chorus Herpes simplex 1 IgG Recombinant Control Serum	81537
Chorus Herpes simplex 2 IgG Recombinant Control Serum	81539
Chorus Tetanus IgG Control Serum	81540
Chorus Diphtheria IgG Control Serum	81541
Chorus Chlamydia Trachomatis IgG Control Serum	81542
Chorus Chlamydia Trachomatis IgA Control Serum	81543
Chorus Parvovirus B19 IgG Control Serum	81544
Chorus Parvovirus B19 IgM Control Serum	81545

Brand:

DIESE

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCES OR MIXTURE AND USES ADVISED AGAINST

Identified use:

Professional use as laboratory reagent.
Reactive human serum for the parameters reported above to be used as control material exclusively in the control of precision of the Chorus/Chorus TRIO instruments.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company:

DIESE Diagnostica Senese SpA

Registered office:

Via A. Solari 19
20144 Milan, Italy
Tel: +39 02 4859121
Fax: +39 02 48008530

Production plant:

Via delle Rose, 10 – Loc. Tognazza
53035 Monteriggioni (SI), Italy
Tel: +39 0577 319560/61
Fax: +39 0577 318763



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1.4 EMERGENCY TELEPHONE NUMBER

Emergency number:

Centro Antiveleni, Ospedale Niguarda Ca' Granda - Milano
Tel: +39 02 66101029

Centro Antiveleni, Azienda Ospedaliera "S.G.Battista" – Molinette di Torino - Torino
Tel: +39 011 6637637

Centro Antiveleni – U.O. Tossicologia Medica, Azienda Ospedaliera Careggi – Firenze
Tel: +39 055 4277238

Centro Antiveleni, Policlinico A. Gemelli – Università Cattolica del Sacro Cuore - Roma
Tel: +39 06 3054343

Centro Antiveleni, Azienda Ospedaliera A. Cardarelli – Napoli
Tel: +39 081 7472870

web: http://www.salute.gov.it/servizio/documenti/centri_antiveleni.pdf

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCES OR MIXTURE

Classification according to Regulation (EC) No. 1272/2008:

Acute Toxicity – Category 4 (Oral)
Skin Sensitizer – Category 1

Hazard statement:

H302 – Harmful if swallowed
H317 – May cause an allergic skin reaction

2.2 LABEL ELEMENTS

Pictograms: GHS07

Signal word: Caution

Hazard statement(s):

H302 – Harmful if swallowed
H317 – May cause an allergic skin reaction.

Precautionary statement(s):

Prevention:

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 – Wash ... thoroughly after handling
P272 – Contaminated work clothing should not be allowed out of the workplace.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P330 – Rinse mouth
P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.
P363 – Wash contaminated clothing before reuse.

Disposal:

P501- Dispose of contents/container in accordance with local regulation

Contains:

Ethylene glycol
Index. No 603-027-00-1
(except codes 81540-81541-81544-81545)

Reaction mass of: 5-chloro-2-methyl-4-iso-thiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1);
Index No: 613-167-00-5

2.3 OTHER HAZARDS

None





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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES Not applicable

3.2 MIXTURES

International Chemical Identification	Concentration	Classification Regulation EC/1272/2008	
Ethylene glycol Cas No 107-21-1 EC No 203-473-3 Index No 603-027-00-1	25-35%	Acute Tox. 4	H302
Reaction mass of: 5-chloro-2-methyl-4-iso-thiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1); Cas No 55965-84-9 Index No 613-167-00-5	0.0015-0.06%	Acute Tox. 3 Acute Tox. 3 Acute Tox. 3 Skin Corr. 1B Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1	H331 H311 H301 H314 H317 H400 H410

The entire text of Hazard Statements is reported at Section 16 of the sheet.

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

- General advice:** Move the person from the exposure to open air. Consult a physician immediately and show this Material Safety Datasheet.
- Skin contact:** Wear off the contaminated clothes and wash with copious amounts of water.
- Eye contact:** If present, remove immediately contact lenses. Wash with plenty of water at least 15 minutes, keeping eyelids opened. Consult an oculist if the irritation persists.
- Inhalation:** Consult a physician.
- Ingestion:** Rinse mouth immediately and drink a copious amounts of water. Call a physician immediately. Do not cause vomiting.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS

Ingestion of the product can cause nausea, vomiting and CNS disorders.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No data available

5. FIREFIGHTING MEASURES

5.1 EXTINGUISH MEDIA

Suitable extinguishing media: Use extinguishing measures (water, CO₂, foam, powder) that are appropriate to local circumstances and the surrounding environment

Not Suitable extinguishing media: None

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

If heated, the mixture may release combustible vapors which diffuse along floors.
The mixture is not flammable, however, in case of fire may release irritating and/or toxic gases (CO₂, CO, NO_x, SO_x, HCl).

5.3 ADVICE FOR FIREFIGHTERS

In case of fire wear self-contained breathing apparatus. Avoid that fire extinguishing water contaminates surface water and/or groundwater.



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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Keep people not involved in the intervention operations away. Avoid inhalation contact with vapors/aerosols. Ensure an adequate ventilation of the affected area.
Do not handle damaged containers or the leaked product before wearing appropriate protective outfit.

6.2 ENVIRONMENTAL PRECAUTIONS

Avoid the contamination of surface water, soil and the dispersion in the air. Do not let product enter into drains. Discharge into the environment must be avoided.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Contain the leakages with earth and sand. Collect the spilled material and store it in suitable containers for disposal. Use water only to remove residuals, to avoid the danger of spill of product into the sewers.

6.4 REFERENCE TO OTHER SECTIONS

For further information see section 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTION FOR SAFE HANDLING

Work in well ventilated areas and in the presence of ventilation systems or personal protective equipment. Do not inhale vapors or mists. Avoid contact with eyes and skin.

7.2 CONDITION FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep the containers at 2-8°C tightly closed and labeled in a cool, well-ventilated area, away from heat sources and from direct sunlight. Keep the containers vertically avoiding the possibility of falls and leakage.

7.3 SPECIFIC END USE

None

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Applicable exposure limits:

Description	Type	TWA/8h		STEL/15min	
		mg/m ³	ppm	mg/m ³	ppm
Ethylene glycol*	D.Lgs 81/2008	52	20	104	40

*Note: Skin

Other information:

Ethylene glycol

Derived no effect level (IUCLID)

PNEC

Fresh water: 10 mg/L

Marine water: 1 mg/L

Intermittent release: 10 mg/L

STP 199.5 mg/L

Sediments (Fresh water): 20.9 mg/kg sediment dw

Soil: 1.53 mg/kg soil dw

DNEL (Workers)

Long-term exposure - systemic effects - dermal: 106 mg/kg bw/day

Long-term exposure - systemic effects - inhalation: 35 mg/m³

DNEL (Population)

Long-term exposure - systemic effects - dermal: 53 mg/kg bw/day

Long-term exposure - systemic effects - inhalation: 7 mg/m³



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8.2 EXPOSURE CONTROLS

Work and handle according to the usual precautionary measures for handling chemicals.

Do not eat, drink or smoke while handling the product; wash hands thoroughly with soap and water before meals and after the work shift. Immediately remove all contaminated clothing.

Appropriate engineering controls:

Ensure an adequate ventilation of the working area.

Personal Protective Equipment:

The suggestions on the use of specific PPE are indicative. Their choice should be made according to the use of the product and the instructions given by the supplier of the device.

Hand protections:

Chemical-resistant gloves, compliant with EN 374.

Suitable material: nitrile rubber (thickness: 0.11 mm).

Gloves have to be checked by the user, before using.

Dispose the used gloves according to good laboratory practices and to law.

Clean and dry the hands after the use.

Eye protections:

Side Shields Safety Goggles compliant with EN 166

Body protections:

Work outfits.

Respiratory protections:

Based on the results of the risk assessment the use a full face mask with combined filter type AP (EN 14387) may be need.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS:

Do not discard residuals in the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Odor:	Characteristic
Odor threshold:	Not pertinent
pH:	No data available
Melting point/freezing point	197.6°C (Ethylene glycol)
Initial boiling point and boiling range	No data available
Flash point	111°C (Ethylene glycol)
Evaporation rate	Not pertinent
Flammability	Not pertinent
Upper/lower flammability or explosive limit	3.2-15,3 % v/v (Ethylene glycol)
Vapor pressure	0.053 hPa at 20°C (Ethylene glycol)
Vapor density	2.14 (Ethylene glycol)
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient: n-octano/water	Log P _{o/w} : - 1.36 (Ethylene glycol)
Autoignition temperature	Not pertinent
Decomposition temperature	200-250°C (Ethylene glycol)
Viscosity	21 mPas (Ethylene glycol)
Explosive properties:	Not explosive
Oxidizing properties	No data available

9.2 OTHER SAFETY INFORMATION

None

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

In case of a strong heating, the product could form vapors, which are flammable if mixed with air.



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10.2 CHEMICAL STABILITY

Stable under the recommended transport, handling and storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Information about the contained substances:

Ethylene glycol

Risk of explosion in case of contact with aluminum and perchloric acid.
Risk of fire or formation of flammable gases in case of contact with chromium chloride, strong oxidizing agents, chlorate, potassium permanganate and peroxides.
Exothermic reactions with chlorosulfonic acid, sodium hydroxide and sulfuric acid are possible.

10.4 CONDITIONS TO AVOID

Avoid the strong heating of the mixture.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing and reducing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

When heated or in case of fire, vapors potentially dangerous to health (boron hydroxyde, COx) may be produced.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

The product is harmful if swallowed.
The product could cause an allergic reaction after skin contact.

Toxicological properties of the substances

Ethylene glycol

Acute toxicity:	No data available
Skin irritation/corrosion:	Results of tests performed using rabbits: Not corrosive; slight irritation of skin with reversible effects within 72h
Eye lesions/severe eye irritation:	Results of tests performed using rabbits: slightly irritating with completely reversible effects
Respiratory/skin sensitization:	Patch test results: Negative
Mutagenicity for germ cells:	Results of in vitro genotoxicity tests (Ames test with metabolic activation): Negative
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Toxicity for target organs (single and repeated exposures):	No data available
Hazards in case of inhalation:	No data available
Additional information:	No data available

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

Use according to the good working practices, avoiding the disposal in the environment. In case the product reach waterways or sewers or contaminate soil or vegetation, inform the competent authorities.

Toxic properties of the substances

Ethylene glycol

Fishes (Oncorhynchus mykiss, 96h): CL50 > 18500 mg/l
Invertebrates (Daphnia magna, 24h): EC50 74000 mg/l
Algae (Scenedesmus quadricauda, 7d): IC50 > 10000 mg/l

12.2 PERSISTENCE AND DEGRADABILITY

Ethylene glycol: readily biodegradable (OECD TG 301C)

12.3 BIOACCUMULATIVE POTENTIAL

No data available



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12.4 MOBILITY IN SOIL

No data available

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

No data available

12.6 OTHER ADVERSE EFFECTS

No data available

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

The product and its containers should be considered special waste.
Their transport and disposal should be performed by authorized specialized companies according to the law.

14. TRANSPORT INFORMATION

Not hazardous good according to the transport regulations.

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Hazard classification and labeling under directives 1272/2008 (EC) and its subsequent amendments.

Legislative Decree 81/2008:

The use of this chemical entails the obligation of "Risk Assessment" by the employer in accordance with the provisions of the Decree April 9, 2008 n. 81 and subsequent amendments. Workers exposed to this chemical agent must not undergo health checks whether the results of the risk assessment show that, depending on the type and quantity of chemical agent and the method and frequency of exposure to this agent, there is only one "Low risk to the safety and irrelevant to the health" of the workers and the measures provided for in the same Decree are sufficient to reduce the risk

European Standard 1907/2006/EC:

Not applicable

Directive 96/82/EC (Seveso Directive):

Not applicable

15.2 CHEMICAL SAFETY ASSESSMENT

Not performed for the product

16. OTHER INFORMATION

This product has to be used for diagnostic use only by personnel who is qualified and trained on the hazards shown in this safety sheet.

Text of the hazard statements present at point 3

H301 Toxic if swallowed
H302 Harmful if swallowed
H311 Toxic in contact with skin
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

REFERENCES:

1. Directive 1999/45/EC and following amendments
2. Regulation (EC) 1907/2006 of the European Parliament (REACH) as amended
3. Regulation (EC) 1272/2008 of the European Parliament (CLP) as amended
4. Commission Regulation (EU) 453/2010
5. ECHA European Chemicals Agency www.echa.europa.eu
6. The Merck Index
7. Handling Chemical Safety
8. NIOSH - Registry of Toxic Effects of Chemical Substances
9. INRS - Fiche Toxicologique



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This data sheet supersedes each previous edition.