

MATERIAL SAFETY DATA SHEET

Toxoplasma gondii whole cell antigen suspension

1. Product and Company Information

Product Name: Toxoplasma gondii whole cell antigen suspension
Product Number: A18-2003
Manufacturer: Medicago AB
Danmark Berga
755 98 Uppsala
Sweden
Phone No: tel.: +46 (0) 18 56 11 80
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2. Composition/Information on Ingredients

Product Name	CAS #	EC no.:		
Toxoplasma gondii whole cell antigen suspension	-	-		
Ingredient name:	Percent	CAS no.:	EC no.:	Index Number
T. gondii tachozites dissolved in formalin and thereby attenuated	Approx 30 x 10 ⁶ tachozites ml	-	-	-
Ingredient name:	Percent	CAS no.:	EC no.:	Index Number
Formaldehyde solution Sigma-Aldrich 533998	> 35 %	50-00-0	200-001-8	605-001-00-5

3. Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Formalin is toxic by inhalation (danger of serious irreversible effects), in contact with skin and if swallowed. May cause sensitization by skin contact. Limited evidence of a carcinogenic effect.

4. First-Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air, call a physician. Show this safety data sheet to the doctor in attendance.

AFTER SKIN CONTACT

In case of contact, take off contaminated clothing, wash immediately wash skin with soap and water. Call a physician.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Do not give anything by mouth to an unconscious person. Do not induce vomiting. Call a physician.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA

Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions. Waterspray, alcohol resistant foam dry chemical or carbon dioxide.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SPECIAL RISKS

No information.

6. Accidental Release Measures

PERSONAL PRECAUTIONS

- Wear respiratory protection.
- Avoid breathing vapours, mist or gas.
- Keep away from sources of ignition. No smoking.

ENVIRONMENTAL PRECAUTIONS

- Prevent further leakage or spilling if safe to do so. Do not let product enter drains.

METHODS FOR CLEANING UP

- Absorb on sand or vermiculite and place in closed containers for disposal of hazardous waste.
- Ventilate area and wash spill site after material pickup is complete.

7. Handling and Storage

HANDLING

Directions for Safe Handling:

- Avoid inhalation of vapour or mist.
- Avoid contact with eyes, skin, and clothing.
- Prevent the build up of electrostatic charge.
- Keep away from sources of ignition. No smoking.

STORAGE

Conditions of Storage:

- Keep tightly closed.
- Store the product at +4°C in a dry and well ventilated place. Opened containers must be carefully released and kept upright to prevent leakage..

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS

- Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

- Wash hands thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection

- Where risk assessment shows air purification respirators are appropriate, use a full face respirator with multi purpose combination (US) or type (ABEK) (EN 14387) respirator cartridges as a back up of engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand Protection:

- Wear protective gloves. The gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye Protection:

- Chemical safety goggles.

9. Physical and Chemical Properties

Appearance	Physical state: clear liquid with pungent odour.	
<u>Property</u>	<u>Value</u>	<u>At Temperature or Pressure</u>
pH	no data available	
Molecular Weight	N/A	
Boiling Point/BP Range	100 °C	at 1.013 hPa
MP/MP Range	no data available	
Freezing Point	N/A	
Auto ignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties (flashpoint)	56 °C	in closed cup
Explosion Limits	7 % (v) – 70 % (v)	
Vapour Pressure	53 hPa	at 39 °C
SG/Density	N/A	
Partition Coefficient	log Pow: 0.35 n-octanol/water	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous	N/A	
Solubility	completely soluble	

10. Stability and Reactivity

STABILITY

Stable: Stable if stored at +4°C under recommended storage conditions.

Materials to Avoid: Strong bases, Acids, Oxidizing reagents, Alkali metals, Amines, Acid chlorides, Acid anhydrides, Reducing agents, Peroxides, Isocyanates, Phenol, Aniline

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon oxides formed under fire conditions

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11. Toxicological Information

SIGNS AND SYMPTOMS OF EXPOSURE

Spasm, inflammation and edema of the larynx and bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath and headache.

ACUTE TOXICITY

No data available.

SENSITISATION

No data available

CHRONIC EXPOSURE

IARC: 1-GROUP 1: Carcinogenic to humans (Formaldehyde)

POTENTIAL HEALTH EFFECT

Inhalation: Toxic if inhaled. The material is extremely destructive to the tissue of the mucus membranes and upper respiratory tract.

Skin Contact: Toxic if absorbed through skin. Causes skin burns.

Eye Contact: May cause eye burns.

Ingestion: Toxic if swallowed. Causes burns.

TARGET ORGANS

Eyes, Kidney, Liver, heart, Central nervous system

12. Ecological Information

ELIMINATION INFORMATION

No data available.

ECOTOXICITY EFFECTS

No data available.

13. Disposal Considerations

SUBSTANCE DISPOSAL

Dispose of all used or unused reagent as well as any other contaminated disposable materials following procedures for infectious or potentially infectious products.

It is the responsibility of each laboratory to handle waste and effluents produced according to their nature and degree of hazardousness and to treat and dispose of them in accordance with any applicable regulations.

Observe all federal, state, and local environmental regulations.

14. Transport Information

RID/ADR UN-Number 1198 Class 3 (8) Packing group: III
Shipping name: *Toxoplasma gondii* whole cell antigen suspension in formaldehyde solution, flammable

IMDG UN-Number 1198 Class 3 (8) Packing group: III EMS-No: F-E, S-C
Shipping name: *Toxoplasma gondii* whole cell antigen suspension in formaldehyde solution, flammable
Marin pollutant: No

IATA UN-Number 1198 Class 3 (8) Packing group: III
Shipping name: *Toxoplasma gondii* whole cell antigen suspension in formaldehyde solution, flammable

15. Regulatory Information

Labelling according to EC Directives

Hazard symbol: T (Toxic)

R-phrase(s)

R11 Highly flammable
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R34 Causes burns
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation in contact with skin and if swallowed.
R40 Limited evidence of carcinogenic effect.
R43 may cause sensitization by skin contact.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately.

Hazardous components which must be listed on the label.

50-00-0 Formaldehyde
67-56-1 Methanol

Not contagious according to UN:NR 3373.

16. Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Medicago AB, Sweden shall not be held liable for any damage resulting from handling or from contact with the above product.

DISCLAIMER

For R&D use only. Not for drug, household or other uses.