

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.12.2011

Version number 1

Revision: 17.03.2009

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

- **1.1. Product identifier**
- **Trade name:** NC 45 Nitrocellulose Membrane, plain, white
- **Article number:** 42516
- **CAS Number:**
9004-70-0
- **Index number:**
603-037-01-3
- **1.2. Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Laboratory chemicals
- **1.3. Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SERVA Electrophoresis GmbH
Carl-Benz-Str. 7
D-69115 Heidelberg
Tel.: +49 6221 13840-0
FAX: +49 6221 13840-10
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **1.4. Emergency telephone number:** +49 6131 19240 (university hospital Mainz)

SERVA
Electrophoresis

2 Hazards identification

- **2.1. Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02

Flam. Sol. 1 H228 Flammable solid.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F; Highly flammable

R11: Highly flammable.

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

- **2.2. Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

- **Hazard pictograms** GHS02

- **Signal word** Danger

- **Hazard statements**

H228 Flammable solid.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.

- **2.3. Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

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· **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.1. Chemical characterization: Substances**
- **CAS No. Description:**
9004-70-0 cellulose nitrate
- **Identification number(s):**
- **Index number:** 603-037-01-3

4 First aid measures

- **4.1. Description of first aid measures**
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Drink copious amounts of water and provide fresh air. Call for doctor immediately.
- **Information for doctor**
- **4.2. Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3. Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1. Extinguishing media**
- **Suitable extinguishing agents** Water spray
- **5.2. Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Hydrogen cyanide (HCN)
In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
HNO₃
- **5.3. Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Keep away from ignition sources
- **6.2. Environmental precautions:** Keep contaminated washing water and dispose of appropriately.
- **6.3. Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **6.4. Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **7.1. Precautions for safe handling** Handle with care. Avoid jolting, friction and impact.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

· 7.2. Conditions for safe storage, including any incompatibilities

· Storage

· Requirements to be met by storerooms and receptacles: Store in a cool location.

· Information about storage in one common storage facility: Not required.

· Further information about storage conditions:

Keep receptacle tightly sealed.

Store in dry conditions.

· 7.3. Specific end use(s) No further relevant information available.

*** 8 Exposure controls/personal protection**

· Additional information about design of technical systems: No further data; see item 7.

· 8.1. Control parameters

· Components with limit values that require monitoring at the workplace: Not required.

· Additional information: The lists that were valid during the creation were used as basis.

· 8.2. Exposure controls

· Personal protective equipment

· General protective and hygienic measures Wash hands before breaks and at the end of work.

· Breathing equipment: Suitable respiratory protective device recommended.

· Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Cotton gloves

· Eye protection: Safety glasses

· Body protection: Protective work clothing.

*** 9 Physical and chemical properties**

· 9.1. Information on basic physical and chemical properties

· General Information

· Appearance:

Form: sheets

Colour: White

· Odour: Odourless

· Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

· Flash point: 12°C

· Flammability (solid, gaseous) Highly flammable.

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· Ignition temperature:	> 160°C
· Self igniting:	Product is not selfigniting.
· Danger of explosion:	Risk of explosion by shock, friction, fire or other sources of ignition.
· Density:	Not determined
· Solubility in / Miscibility with Water:	Insoluble
· 9.2. Other information	Deflagration at 180 °C

10 Stability and reactivity

- **10.1. Reactivity**
- **10.2. Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3. Possibility of hazardous reactions** No dangerous reactions known
- **10.4. Conditions to avoid** No further relevant information available.
- **10.5. Incompatible materials:** No further relevant information available.
- **10.6. Hazardous decomposition products:**
Nitrogen oxides
Hydrogen cyanide (prussic acid)

11 Toxicological information

- **11.1. Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

* 12 Ecological information

- **12.1. Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **12.2. Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **12.3. Bioaccumulative potential** No further relevant information available.
- **12.4. Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **12.5. Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6. Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1. Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· 14.1. UN-Number	
· ADR, IMDG, IATA	3270
· 14.2. UN proper shipping name	
· ADR	3270 NITROCELLULOSE MEMBRANE FILTER
· IMDG, IATA	NITROCELLULOSE MEMBRANE FILTER
· 14.3. Transport hazard class(es)	
· ADR	
	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	4.1
· IMDG, IATA	
	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	4.1
· 14.4. Packing group	
· ADR, IMDG, IATA	II
· 14.6. Special precautions for user	Warning: Flammable solids, self-reactive substances and solid desensitised explosives.
· Danger code (Kemler):	-
· EMS Number:	F-A,S-I
· 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Tunnel restriction code	E
· UN "Model Regulation":	UN3270, NITROCELLULOSE MEMBRANE FILTER, 4.1, II

15 Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Water hazard class:** Generally not hazardous for water.

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· 15.2. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Product safety department**· Contact:** +49 6221 13840-35**· Abbreviations and acronyms:***PBT: persistent, bioaccumulative, toxic substance (REACH)**vPvB: very persistent, very bioaccumulative substance (REACH)**REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals**CLP: Regulation on classification, labelling and packaging of substances and mixtures**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**ICAO: International Civil Aviation Organization**GHS: Globally Harmonized System of Classification and Labelling of Chemicals**CAS: Chemical Abstracts Service (division of the American Chemical Society)***· * Data compared to the previous version altered.**

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