

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

Printing date 19.12.2011

Version number 1

Revision: 19.12.2011

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:** 71208
- **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.

(Contd. on page 2)

GB

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

Printing date 19.12.2011

Version number 1

Revision: 19.12.2011

Trade name: NC 45 Nitrocellulose Membrane, plain, white

(Contd. of page 1)

· **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.

(Contd. on page 3)

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

Printing date 19.12.2011

Version number 1

Revision: 19.12.2011

Trade name: NC 45 Nitrocellulose Membrane, plain, white

(Contd. of page 2)

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: Roll

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.

(Contd. on page 4)

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

Printing date 19.12.2011

Version number 1

Revision: 19.12.2011

Trade name: NC 45 Nitrocellulose Membrane, plain, white

(Contd. of page 3)

- | | |
|--|--|
| · 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.

(Contd. on page 5)

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

Printing date 19.12.2011

Version number 1



Revision: 19.12.2011

Trade name: NC 45 Nitrocellulose Membrane, plain, white

(Contd. of page 4)

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

14 Transport information

· 14.1. UN-Number · ADR, IMDG, IATA	UN3270
· 14.2. UN proper shipping name · ADR · IMDG · IATA	3270 NITROCELLULOSE MEMBRANE FILTER NITROCELLULOSE MEMBRANE FILTERS Nitrocellulose membrane filters
· 14.3. Transport hazard class(es) · ADR	
	
· Class · Label	4.1 Flammable solids, self-reactive substances and solid desensitised explosives. 4.1
· IMDG, IATA	
	
· Class · Label	4.1 Flammable solids, self-reactive substances and solid desensitised explosives. 4.1
· 14.4. Packing group · ADR, IMDG, IATA	II
· 14.5. Environmental hazards: · Marine pollutant:	No
· 14.6. Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Flammable solids, self-reactive substances and solid desensitised explosives. - 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

GB

(Contd. on page 6)

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

Printing date 19.12.2011

Version number 1

Revision: 19.12.2011

Trade name: NC 45 Nitrocellulose Membrane, plain, white

(Contd. of page 5)

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.
- **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.**

GB