Safety data sheet

ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll

Product name ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll	Catalog no. NC022 (0.22 µm); NC045 (0.45 µm)
Synonyms Cellulose nitrate membrane / transfer membrane	Revision date -
CAS no. 9004-70-0	Document version / date 3 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll
Product code	NC022 (0.22 µm); NC045 (0.45 µm)
CAS number	9004-70-0
EC number	-
Recommended use	Membrane for Western blotting, dot-blotting and protein/nucleic-acid transfer assays. For research use only.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Flammable solid, Category 1 (GHS02, H228)
Label elements	Flammable solids: GHS02 pictogram; H228.
Symbols / pictograms	
Signal word	Danger
Hazard statements	H228 - Flammable solid.
Precautionary statements - Prevention	P210 - Keep away from heat, sparks, open flames and hot surfaces. No smoking. P280 - Wear protective gloves and eye protection.
Precautionary statements - Response	P370+P378 - In case of fire: use water spray, dry powder, foam or CO2 as appropriate.
Other hazards	Nitrocellulose can burn rapidly when dry; burning or decomposition can release irritating/toxic gases.

Composition & response

ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll
Synonyms	Cellulose nitrate membrane / transfer membrane
Concentration	Roll, 30 cm x 300 cm; pore size 0.22 or 0.45 µm
Formula	Cellulose nitrate polymer (composition variable)
Molecular weight	Not applicable (polymer)
Mixture statement	Nitrocellulose (cellulose nitrate) membrane, CAS 9004-70-0.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse gently with water if particles enter the eye. Get medical advice if irritation persists.
Skin contact	Wash with soap and water if irritation occurs.
Inhalation	If dust or combustion products are inhaled, move to fresh air. Seek urgent medical attention after fire-smoke exposure.
Ingestion	Rinse mouth and seek medical advice if swallowed. Do not induce vomiting unless instructed by medical personnel.
Self-protection of first aider	Avoid dust and fire smoke; use suitable PPE before assisting.
Most important symptoms / effects	Mechanical irritation from particles; heated or burning nitrocellulose can produce irritating/toxic fumes.
Notes to physicians	Treat symptomatically; urgent assessment may be needed after inhalation of fire decomposition products.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, CO2, dry powder or foam. Cool exposed packaging from a protected location.
Unsuitable extinguishing media	Avoid high-pressure water jets if they spread burning fragments.
Special hazards arising from the substance or mixture	Flammable dry membrane; may ignite and burn rapidly. Fire can release nitrogen oxides, CO and CO2.
Explosion data	Rapid burning and fire propagation are possible; avoid ignition, friction and excessive heat.
Advice for firefighters	Evacuate area and use self-contained breathing apparatus and protective clothing.

Safe use & protection

ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Remove ignition sources. Avoid generating loose fibres or dust. Wear gloves and safety glasses.
Environmental precautions	Keep fragments out of drains and waterways.
Methods and materials for containment and cleaning up	Collect mechanically with non-sparking equipment and put into a compatible closed container; do not use open flame.
Reference to other sections	See Sections 5, 8 and 13.

07 HANDLING AND STORAGE

Precautions for safe handling	Keep dry membranes away from flames, sparks and hot surfaces. Minimize friction and dust generation. Cut with clean tools and keep work area tidy.
Conditions for safe storage	Store in original packaging at 15-25 C, away from direct sunlight, heat and ignition sources.
Container labeling	Label as nitrocellulose membrane, 0.22 µm (NC022) or 0.45 µm (NC045); keep away from ignition sources.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No specific occupational exposure limit identified for this finished membrane. Control dust and combustion fume exposure.

8.2 Exposure controls

Engineering measures	Normal room ventilation; prevent accumulation of flammable cuttings and dust.
Hygiene measures	Avoid smoking, open flame, hot work and eating or drinking in the work area.
Eye / face protection	Safety glasses (EN 166) when cutting or handling loose material.
Hand protection	Clean protective gloves; avoid contamination with flammable solvents.
Skin and body protection	Laboratory coat and closed footwear.
Respiratory protection	Not normally necessary for intact sheets; assess respiratory controls if dust or smoke is present.

Material properties

ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Solid porous membrane film supplied in a roll.
Odor	No data available.
Odor threshold	No data available
pH	Not applicable (solid membrane).
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	Not applicable (solid); flammability is the relevant endpoint.
Evaporation rate	No data available
Flammability (solid, gas)	Flammable solid; H228.
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 STABILITY AND REACTIVITY

Reactivity	Dry nitrocellulose can ignite and burn rapidly when exposed to sufficient heat or ignition sources.
Chemical stability	Maintain 15-25 C and original packaging away from heat and ignition sources.
Possibility of hazardous reactions	Rapid combustion is possible; no product-specific decomposition test available.
Conditions to avoid	Heat, sparks, flames, high-temperature surfaces and excessive mechanical friction.
Incompatible materials	Strong oxidizing agents, ignition sources and incompatible solvents.
Hazardous decomposition products	Nitrogen oxides, carbon monoxide, carbon dioxide and other combustion products.

Health & environment

ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	No product-specific acute toxicity test data available for finished membrane.
Skin corrosion / irritation	May cause mechanical irritation; no product-specific test data.
Serious eye damage / eye irritation	Loose particles may mechanically irritate eyes.
Carcinogenicity	No product-specific carcinogenicity data available.
Reproductive toxicity	No product-specific reproductive toxicity data available.
STOT - SE	No product-specific data available.
STOT - RE	No product-specific data available.
Aspiration hazard	Not applicable for a solid membrane sheet.

11.2 Potential health effects

Ingestion: avoid ingesting fragments.
Inhalation: combustion fumes may cause respiratory injury.
Skin: possible mechanical irritation.
Eyes: loose fragments may irritate.

11.3 Additional information

Main identified hazard is physical flammability of dry nitrocellulose.

12 ECOLOGICAL INFORMATION

Ecotoxicity	No finished-product aquatic toxicity data available.
Persistence and degradability	No test data available.
Bioaccumulative potential	No data available.
Mobility in soil	Not applicable for intact solid membrane.
Results of PBT and vPvB assessment	Not assessed.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Collect membrane scraps separately from ignition sources. Dispose according to applicable requirements for flammable laboratory solids. Do not burn or discard into drains.
Contaminated packaging	Keep contaminated packaging away from ignition sources; dispose according to local regulations.

Transport & reference

ClearBand Nitrocellulose Membrane, 0.22 µm / 0.45 µm, Roll | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	UN3270	NITROCELLULOSE MEMBRANE FILTERS	4.1	II	Not assessed
IMDG	UN3270	NITROCELLULOSE MEMBRANE FILTERS	4.1	II	Not assessed
IATA	UN3270	NITROCELLULOSE MEMBRANE FILTERS	4.1	II	Not assessed

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1272/2008 (CLP) and applicable dangerous-goods rules (ADR/RID, IMDG and IATA). Verify final product classification and packaging provisions.
Environmental hazards	No finished-product environmental hazard assessment available.
Chemical safety assessment	No finished-product chemical safety assessment available.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail

Transport and hazard classification is subject to final product-specific verification.