

Printing date 07/13/2018 Reviewed on 07/13/2018

#### 1 Identification

- · Product identifier
- · Trade name: Trans-Blot® Transfer Medium 0.2, 0.45 micron
- · Catalog or product number:

1620112, 1620146, 1620147, 1620150, 1620082, 1620168EDU, 1620086, 1620147EDU, 1620168, 1620252, 1620082EDU, 1620150EDU, 1620086EDU, 1620146EDU, 1620112EDU, 1620113, 1620114, 1620115, 1620116, 1620117, 1620145, 1620148, 1620167, 1620251, 1703202, 1620113EDU, 1620114EDU, 1620115EDU, 1620116EDU, 1620117EDU, 1620145EDU, 1620148EDU, 1620167EDU, 4307571, 4307574, 1703202EDU

· CAS Number:

9004-70-0

· Index number:

603-037-01-3

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories, Life Science Group

2000 Alfred Nobel Drive

Hercules, California 94547

(510)741-1000

- · Information department: lsg\_techserv\_us@bio-rad.com
- Emergency telephone number:

1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

510-741-1000

### 2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Sol. 1 H228 Flammable solid.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS02

- · Signal word Danger
- · Hazard statements

H228 Flammable solid.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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## 3 Composition/information on ingredients

· Chemical characterization: Substances

• CAS No. Description: 9004-70-0 nitrocellulose

· Identification number(s):

· Index number: 603-037-01-3

· Additional information: For the wording of the listed risk phrases refer to section 15.

#### 4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment (See section 8). Keep unprotected persons away. Wear protective clothing.

- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

- Protective Action Criteria for Chemicals
- · PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

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PAC-3:

Substance is not listed.

### 7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · 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.
- · 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.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures Wash hands before breaks and at the end of work.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · 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.

· Eye protection: Safety glasses

## 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid
Color: White

Odor: Odorless

Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

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· Flash point:	Not applicable	
· Flammability (solid, gaseous)	Flammable.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapor pressure:	Not applicable.	
Density at 20°C: Relative density Vapor density Evaporation rate	1.65 g/cm <sup>3</sup> Not determined. Not applicable. Not applicable.	
· Solubility in / Miscibility with Water:	Insoluble	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity: dynamic: kinematic:	Not applicable. Not applicable.	
Solids content: · Other information	100.0 % No further relevant information available.	

## 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological information

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

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- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

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

#### 14 Transport information

- · UN-Number
- · DOT, ADR, IMDG, IATA

UN3270

· UN proper shipping name

DOT, IMDG, IATA

NITROCELLULOSE MEMBRANE FILTER (less than 12.6% nitrogen by dry mass)

ADR 3270 NITROCELLULOSE MEMBRANE FILTER

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· Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives	
· Label	4.1	
· Packing group · DOT, ADR, IMDG, IATA	II	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Warning: Flammable solids, self-reactive substances and solid desensitised explosives	
Danger code (Kemler):	46	
· EMS Number: · Stowage Category	F-A,S-I D	
<u> </u>		
Transport in bulk according to Annex II of Ma and the IBC Code	ARPOL73/78  Not applicable.	
· Transport/Additional information:		
· DOT		
Quantity limitations	Void	
	Void	
ADR		
· Excepted quantities (EQ)	Code: E2	
	Maximum net quantity per inner packaging: 30 g	
	Maximum net quantity per outer packaging: 500 g	
· IMDG		
Limited quantities (LQ)	1 kg	
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g	
	Maximum net quantity per inner packaging: 50 g  Maximum net quantity per outer packaging: 500 g	
· UN "Model Regulation":	UN 3270 NITROCELLULOSE MEMBRANE FILTERS, 4.1, II	

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

Substance not listed.

· Section 313 (40CFR372.65):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

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· TSCA new (21st Century Act)

ACTIVE/EXEMPT

· California Proposition 65:

Substance is not listed.

· Chemicals known to cause cancer:

Substance is not listed.

Developmental Toxicity

Substance is not listed.

- · Carcinogenic categories
- EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· MAK (German Maximum Workplace Concentration)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · 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 SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of preparation / last revision 07/13/2018 / -
- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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Flam. Sol. 1: Flammable solids – Category 1

\* \* Data compared to the previous version altered.

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