

Revision date 28-Jan-2022

Revision Number 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** 0.2, 0.45 mic Nitrocellulose/Filter Paper Sandwich

### Other means of identification

**Catalogue Number(s)** 1620212, 1620213, 1620214, 1620215, 1620232, 1620233, 1620234, 1620235, 1620212EDU, 1620213EDU, 1620214EDU, 1620215EDU, 1620232EDU, 1620233EDU, 1620234EDU, 1620235EDU

**UN/ID no** UN3270

**Registration Number(s)** No information available

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory chemicals

### Supplier's details

#### Corporate Headquarters

Bio-Rad Laboratories Inc.  
1000 Alfred Nobel Drive  
Hercules, CA 94547  
USA

#### Manufacturer

Bio-Rad Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pvt. Ltd.  
Bio-Rad House  
86-87, Udyog Vihar Phase IV Gurgaon  
122005  
Haryana India

Bio-Rad Laboratories (Pty) Ltd.  
34 Bolton Road  
Parkwood, Johannesburg 2193  
South Africa

### Technical Service

India: 91-124-4029300 or 1-800-180-1224  
South Africa: 27-11-442-85-08  
India: support.india@bio-rad.com  
South Africa: cdg\_techsupport\_eemea@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC India: 000-800-100-7141  
CHEMTREC South Africa: 0-800-983-611

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Flammable solids

Category 1

### GHS Label elements, including precautionary statements



**Signal word****Danger**

Flammable solid

**Precautionary Statements - Prevention**

Ground and bond container and receiving equipment

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

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

**Fire**

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

**Other hazards which do not result in classification**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical name	CAS No	Weight-%
Nitrocellulose 9004-70-0	9004-70-0	100

**4. FIRST AID MEASURES****Description of necessary first aid measures****Inhalation**

Remove to fresh air.

**Skin contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Ingestion**

Rinse mouth thoroughly with water.

**For emergency responders****Self-protection of the first aider**

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed****Symptoms**

No information available.

**Indication of immediate medical attention and special treatment needed, if necessary****Note to physicians**

Treat symptomatically.

**5. FIREFIGHTING MEASURES****Suitable Extinguishing Media****Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

**Large Fire**

CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Environmental precautions**

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Keep out of drains, sewers, ditches and waterways.

**Methods for cleaning up** Take precautionary measures against static discharges. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Other information** Ventilate the area.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Exposure guidelines      This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

### Appropriate engineering controls

Engineering controls      Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection**      Tight sealing safety goggles.

**Skin and body protection**      Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

**Hand protection**      Wear suitable gloves. Impervious gloves.

**Respiratory protection**      No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations**      Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Odour</b>	Odourless
<b>Appearance</b>	Nitrocellulose membrane filters	<b>Odour threshold</b>	No information available
<b>Colour</b>	white		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
pH		No information available	
Melting point / freezing point		No information available	
Boiling point / boiling range		No information available	
Flash point	12.8 °C / 55 °F		
Evaporation rate		No information available	
Flammability (solid, gas)		No information available	
Upper/lower flammability or explosive limits			
Upper flammability or explosive limits	15		
Lower flammability or explosive limits	3.5		
Vapour pressure		No information available	
Vapour density		No information available	
Relative density		No information available	
Solubility(ies)			
Water solubility	Insoluble in water		
Solubility in other solvents		No information available	
Partition coefficient		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity			
Kinematic viscosity		No information available	
Dynamic viscosity			

**Other information**

Oxidising properties Not applicable

**10. STABILITY AND REACTIVITY****Reactivity**

Reactivity No information available.

**Chemical stability**

Stability Stable under normal conditions.

**Explosion data**

Sensitivity to mechanical impact None

Sensitivity to static discharge Yes.

**Possibility of hazardous reactions**

Possibility of hazardous reactions None under normal processing.

**Conditions to avoid**

Conditions to avoid Heat, flames and sparks.

**Incompatible materials**

Incompatible materials None known based on information supplied.

**Hazardous decomposition products**

Hazardous decomposition products None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on the likely routes of exposure****Product Information**

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms No information available.

**Acute toxicity****Numerical measures of toxicity**

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

5,005.00 mg/kg

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nitrocellulose	> 5 g/kg ( Rat )	-	-

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Skin corrosion/irritation** No information available.

**Serious eye damage/irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Chemical name	IARC
Nitrocellulose	Group 2A

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

**Toxicity**

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Persistence and degradability**

No information available.

**Bioaccumulative potential**

No information available.

**Mobility**

**Mobility in soil** No information available.

**Mobility** No information available.

**Other adverse effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

<b>Waste from residues/unused products</b>	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

## 14. TRANSPORT INFORMATION

### IMDG

<b>UN number or ID number</b>	UN3270
<b>UN proper shipping name</b>	Nitrocellulose membrane filters
<b>Description</b>	UN3270, NITROCELLULOSE MEMBRANE FILTERS, 4.1, II
<b>Transport hazard class(es)</b>	4.1
<b>Packing group</b>	II
<b>Marine pollutant</b>	NP
<b>Special Provisions</b>	237, 286
<b>EmS-No</b>	F-A, S-I
<b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	No information available

### IATA

<b>UN number or ID number</b>	UN3270
<b>UN proper shipping name</b>	Nitrocellulose membrane filters
<b>Description</b>	UN3270, Nitrocellulose membrane filters, 4.1, II
<b>Transport hazard class(es)</b>	4.1
<b>Packing group</b>	II
<b>Special Provisions</b>	A57, A73, A122
<b>ERG Code</b>	3L

### RID

<b>UN number</b>	UN3270
<b>UN proper shipping name</b>	Nitrocellulose membrane filters
<b>Description</b>	UN3270, NITROCELLULOSE MEMBRANE FILTERS, 4.1, II
<b>Transport hazard class(es)</b>	4.1
<b>Labels</b>	4.1
<b>Packing group</b>	II
<b>Classification code</b>	F1
<b>Special Provisions</b>	237, 286

### ADR

<b>UN number or ID number</b>	3270
<b>UN proper shipping name</b>	Nitrocellulose membrane filters
<b>Description</b>	3270, NITROCELLULOSE MEMBRANE FILTERS, 4.1, II
<b>Transport hazard class(es)</b>	4.1
<b>Labels</b>	4.1
<b>Packing group</b>	II
<b>Classification code</b>	F1
<b>Special Provisions</b>	237, 286

### ADN

<b>UN number</b>	UN3270
<b>UN proper shipping name</b>	Nitrocellulose membrane filters
<b>Description</b>	UN3270, NITROCELLULOSE MEMBRANE FILTERS, 4.1, II
<b>Transport hazard class(es)</b>	4.1
<b>Hazard label(s)</b>	4.1
<b>Packing group</b>	II
<b>Classification code</b>	F1
<b>Special Provisions</b>	237, 286
<b>Limited quantity (LQ)</b>	1 kg
<b>Equipment Requirements</b>	PP

**Special precautions for user**

Special provisions from the regulations relative to the specified mode of transport are noted by numeric code. Refer to the regulations for the full text of special provisions.

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories**

Contact supplier for inventory compliance status

**16. OTHER INFORMATION****Prepared By**

Bio-Rad Laboratories, Environmental Health and Safety

**Revision date**

28-Jan-2022

**Revision Note**

\*\*\* Indicates this information has changed since the previous revision.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**