

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Revision Date 06.08.2018

Version 1.2

**SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Catalogue No.	622738
Millipore Ref.	HABG050S6
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses	Biochemical research/analysis For additional information on uses please refer to the Merck Chemicals portal ( <a href="http://www.merckgroup.com">www.merckgroup.com</a> ).
-----------------	--

**1.3 Details of the supplier of the safety data sheet**

Responsible Department	LS-QHC * e-mail: <a href="mailto:prodsafe@merckgroup.com">prodsafe@merckgroup.com</a>
Regional representation	Merck Chemicals Ltd * Boulevard Industrial Park * Padge Road * Beeston * Nottingham * NG9 2JR * Tel. 01159 430840 * <a href="mailto:information@merckchem.co.uk">information@merckchem.co.uk</a> .

<b>1.4 Emergency telephone number</b>	+49 (0) 6151 722440
---------------------------------------	---------------------

**SECTION 2. Hazards identification****2.1 Classification of the substance or mixture**

Classification (REGULATION (EC) No 1272/2008)

Flammable solid, Category 1, H228

For the full text of the H-Statements mentioned in this Section, see Section 16.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H228 Flammable solid.

#### Precautionary statements

##### Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### Response

P370 + P378 In case of fire: Use powder for extinction.

#### Reduced labelling (≤125 ml)

##### Hazard pictograms



##### Signal word

Danger

##### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P370 + P378 In case of fire: Use powder for extinction.

## 2.3 Other hazards

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

None known.

---

## SECTION 3. Composition/information on ingredients

Chemical nature Contains nitrocellulose.

### 3.1 Substance

Not applicable

### 3.2 Mixture

#### Hazardous components (REGULATION (EC) No 1272/2008)

*Chemical name (Concentration)*

CAS-No.	Registration number	Classification
		Octylphenol polyethoxyethanol ( $\geq 0.025\%$ - $< 0.25\%$ )

9036-19-5 \*)

Acute toxicity, Category 4, H302

Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

Acute aquatic toxicity, Category 1, H400

Chronic aquatic toxicity, Category 1, H410

M-Factor: 10

\*) A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

---

## SECTION 4. First aid measures

### 4.1 Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

#### 4.2 Most important symptoms and effects, both acute and delayed

Risk of methaemoglobin formation.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No information available.

---

### SECTION 5. Firefighting measures

#### 5.1 Extinguishing media

*Suitable extinguishing media*

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

*Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

#### 5.2 Special hazards arising from the substance or mixture

Combustible.

Spontaneous ignition at elevated temperatures.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

nitrogen oxides, nitrous gases

#### 5.3 Advice for firefighters

*Special protective equipment for firefighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

*Further information*

Suppress (knock down) gases/vapours/mists with a water spray jet. Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

### SECTION 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

Indications about waste treatment see section 13.

---

## SECTION 7. Handling and storage

### 7.1 Precautions for safe handling

#### *Advice on safe handling*

Observe label precautions.

#### *Advice on protection against fire and explosion*

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### *Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

### 7.2 Conditions for safe storage, including any incompatibilities

#### *Storage conditions*

Tightly closed. Dry. Keep away from heat and sources of ignition. Keep away from direct sunlight.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

Performing regular visual inspections of membranes and keeping accurate records of recommended shelf life can reduce the risk of membrane deterioration. Shelf-life limited when kept above +25°C. Verify on a regular basis expiry dates of stored materials, housekeeping, temperature and humidity. Designated "Flammable Material" storage areas must be engineered according to local regulations. Rotate stock. Improper storage conditions can accelerate deterioration of the membrane in advance of expiration date. Storage humidity: 30 - 70 %. Perform regular visual inspections of stored materials to ensure early stages of deterioration does not advance. Early stages of deterioration: Amber or yellow discoloration. Advanced stages of deterioration: visible liquid or solid brown resin. If membrane shows visual indications of deterioration, safely dispose of product according to local regulations.

There is an 18 month expiration date given to all triton-free nitrocellulose membranes. Storage under improper conditions could lead to the membrane self-decomposing at ambient temperatures with the formation of nitrous vapors or self ignition.

Recommended storage temperature see product label.

#### *Advice on common storage*

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

---

## **SECTION 8. Exposure controls/personal protection**

### **8.1 Control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

### *Eye/face protection*

Safety glasses

### *Hand protection*

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

### *Other protective equipment*

protective clothing

### *Respiratory protection*

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## Environmental exposure controls

Do not let product enter drains.

---

## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	solid
Colour	coloured
Odour	No strong odour known.
Odour Threshold	No information available.
pH	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	The substance or mixture is a flammable solid with the category 1.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

Relative vapour density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	No information available.
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

## 9.2 Other data

none

---

## SECTION 10. Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

Product is sensitive to light and moisture.  
Prolonged exposure to air may cause discolouration.

### 10.3 Possibility of hazardous reactions

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

Risk of ignition or formation of inflammable gases or vapours with:

Oxidizing agents, Bases, Strong acids

## 10.4 Conditions to avoid

Heating (decomposition).

Exposure to sunlight.

## 10.5 Incompatible materials

no information available

## 10.6 Hazardous decomposition products

in the event of fire: See section 5.

---

## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects

#### Mixture

##### *Acute oral toxicity*

This information is not available.

##### *Acute inhalation toxicity*

This information is not available.

##### *Acute dermal toxicity*

This information is not available.

##### *Skin irritation*

This information is not available.

##### *Eye irritation*

This information is not available.

##### *Sensitisation*

This information is not available.

##### *Germ cell mutagenicity*

This information is not available.

##### *Carcinogenicity*

This information is not available.

---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## *Reproductive toxicity*

This information is not available.

## *Teratogenicity*

This information is not available.

## *Specific target organ toxicity - single exposure*

This information is not available.

## *Specific target organ toxicity - repeated exposure*

This information is not available.

## *Aspiration hazard*

This information is not available.

## 11.2 Further information

After uptake:

Risk of methaemoglobin formation.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## Components

### *Octylphenol polyethoxyethanol*

#### *Acute oral toxicity*

LD50 Rat: 1,900 - 5,000 mg/kg  
(External MSDS)

#### *Acute dermal toxicity*

LD50 Rabbit: > 3,000 mg/kg  
(External MSDS)

#### *Skin irritation*

Rabbit

Result: irritating

OECD Test Guideline 404

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## *Sensitisation*

Sensitisation test: human

Result: negative

(External MSDS)

---

## SECTION 12. Ecological information

### Mixture

#### 12.1 Toxicity

No information available.

#### 12.2 Persistence and degradability

No information available.

#### 12.3 Bioaccumulative potential

No information available.

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

#### 12.6 Other adverse effects

*Additional ecological information*

Discharge into the environment must be avoided.

### Components

#### *Octylphenol polyethoxyethanol*

##### *Toxicity to fish*

semi-static test LC50 *Leuciscus idus* (Golden orfe): 0.26 mg/l; 96 h

Analytical monitoring: yes

OECD Test Guideline 203

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

##### *Toxicity to daphnia and other aquatic invertebrates*

static test EC50 *Daphnia magna* (Water flea): 0.011 mg/l; 48 h

(ECOTOX Database) The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## *Toxicity to algae*

static test EC50 *Pseudokirchneriella subcapitata* (green algae): 1.9 mg/l; 96 h  
(ECHA) The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

## *Toxicity to fish (Chronic toxicity)*

flow-through test *Danio rerio* (zebra fish): 0.012 mg/l  
Analytical monitoring: yes  
OECD Test Guideline 210  
The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

## *Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)*

semi-static test NOEC *Daphnia magna* (Water flea): 0.03 mg/l; 21 d  
Analytical monitoring: yes  
OECD Test Guideline 202  
The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

## *Biodegradability*

22 %; 28 d; aerobic  
OECD Test Guideline 301C

Not readily biodegradable.

## *M-Factor*

10

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	622738
Product name	0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

## SECTION 13. Disposal considerations

### *Waste treatment methods*

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Notice Directive on waste 2008/98/EC.

---

## SECTION 14. Transport information

### Land transport (ADR/RID)

14.1 UN number	UN 3270
14.2 Proper shipping name	NITROCELLULOSE MEMBRANE FILTERS
14.3 Class	4.1
14.4 Packing group	II
14.5 Environmentally hazardous	--
14.6 Special precautions for user	yes
Tunnel restriction code	E

### Inland waterway transport (ADN)

Not relevant

### Air transport (IATA)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

14.1 UN number UN 3270  
14.2 Proper shipping name NITROCELLULOSE MEMBRANE FILTERS  
14.3 Class 4.1  
14.4 Packing group II  
14.5 Environmentally hazardous --  
14.6 Special precautions for user no

#### Sea transport (IMDG)

14.1 UN number UN 3270  
14.2 Proper shipping name NITROCELLULOSE MEMBRANE FILTERS  
14.3 Class 4.1  
14.4 Packing group II  
14.5 Environmentally hazardous --  
14.6 Special precautions for user yes

EmS F-A S-I

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Not relevant

---

## SECTION 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### *EU regulations*

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that not regulated  
deplete the ozone layer

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC not regulated

Substances of very high concern (SVHC) This product does contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 59 above the respective regulatory concentration limit of > 0.1 % (w/w).

Contains: Octylphenol polyethoxyethanol

This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006.

Listed substance / Sunset Date: Octylphenol polyethoxyethanol / 04.01.2021

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

#### *National legislation*

Storage class 4.1B

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

---

## SECTION 16. Other information

### Full text of H-Statements referred to under sections 2 and 3.

H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 622738  
Product name 0.45µm 50mm black gridded S-Pak filter membrane made of mixed ester cellulose.

---

H410 Very toxic to aquatic life with long lasting effects.

## Training advice

Provide adequate information, instruction and training for operators.

## Labelling

*Hazard pictograms*



*Signal word*

Danger

*Hazard statements*

H228 Flammable solid.

*Precautionary statements*

Prevention

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

Response

P370 + P378 In case of fire: Use powder for extinction.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

---

*The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.*