

# Material Safety Data Sheet

Australia  
English

## 1. Identification of the material and supplier

**Product name** Amersham™ Protran™ Supported Nitrocellulose  
PT 0.2 µm, 102x133 mm, 10/PK

**Catalogue Number** 10600125



### Company details

#### Manufacturer

GE Healthcare UK Ltd  
Amersham Place  
Little Chalfont  
Buckinghamshire HP7 9NA  
England  
+44 0870 606 1921

#### Supplier

GE Healthcare Bio-Sciences  
Building 4B, Parklands Estate  
21 South Street  
Rydalmere NSW 2116  
Australia  
+61 2 8820 8299

**Emergency telephone number** 000 and +61 2 9846 4000

**Chemical product name** Nitrocellulose

**Synonyms**

ADG

**Molecular formula**  $\text{HNO}_3 \cdot x\text{Unspecified}$

### Uses

**Area of application** Industrial applications.  
**Material uses** Analytical chemistry. Research.  
**Product type** Solid.

## 2. Hazards identification

**Classification** F, R11

**Risk phrases** R11- Highly flammable.

**Safety phrases** S16- Keep away from sources of ignition - No smoking.  
S33- Take precautionary measures against static discharges.  
S37/39- Wear suitable gloves and eye/face protection.

### Statement of hazardous/dangerous nature

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

## 3. Composition/information on ingredients

**Mixture** No.

**Chemical name** Nitrocellulose

**Synonyms**

**CAS number** 9004-70-0

**Chemical formula**  $\text{HNO}_3 \cdot x\text{Unspecified}$

### Additional information

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.



## 4. First-aid measures

### First-aid measures

<b>Eye contact</b>	☑ In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.
<b>Skin contact</b>	☑ Wash with soap and water. Get medical attention if irritation develops.
<b>Inhalation</b>	☑ No special recommendations.
<b>Ingestion</b>	☑ No special recommendations.
<b>Protection of first-aiders</b>	☑ No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable</b>	☑ Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Not suitable</b>	☑ Do not use water jet.
<b>Special exposure hazards</b>	☑ Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. ☑ Highly flammable solid. Runoff to sewer may create fire or explosion hazard.
<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Hazardous combustion products</b>	Decomposition products may include the following materials: nitrogen oxides
<b>Special remarks on fire hazards</b>	☑ Product becomes a 'Flammable Solid category 2' after removing the membrane from the package. If the product is still in its original packaging it is not a 'Flammable Solid category 2'.

## 6. Accidental release measures

<b>Personal precautions</b>	☑ Eliminate all ignition sources. Vacuum or sweep up material and place in a designated, labelled waste container.
<b>Environmental precautions</b>	☑ No special recommendations.
<b>Methods for cleaning up</b>	☑ Eliminate all ignition sources. Vacuum or sweep up material and place in a designated, labelled waste container.
<b>Small spill</b>	☑ Eliminate all ignition sources. Vacuum or sweep up material and place in a designated, labelled waste container.

## 7. Handling and storage

<b>Handling</b>	☑ Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Storage</b>	☑ Store between the following temperatures: 18 to 25°C (64.4 to 77°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure standard allocated.
<b>Recommended monitoring procedures</b>	☑ No special recommendations.
<b>Engineering measures</b>	☑ Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
<b>Hygiene measures</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Personal protection</b>	
<b>Eyes</b>	☑ Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.



<b>Hands</b>	☑ Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
<b>Respiratory</b>	☑ A respirator is not needed under normal and intended conditions of product use.
<b>Skin</b>	☑ Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
<b>Environmental exposure controls</b>	☑ No specific hazard.

## 9. Physical and chemical properties

<b>Physical state</b>	Solid.
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>Vapour pressure</b>	☑ kPa (0 mm Hg) [room temperature]
<b>Density</b>	☑ 1.66 g/cm <sup>3</sup>
<b>Flash point</b>	☑ closed cup: 12.85°C (55.1°F)
<b>Viscosity</b>	☑ Dynamic (room temperature): Not applicable. Kinematic (room temperature): Not applicable.
<b>Auto-ignition temperature</b>	>160°C (>320°F)
<b>Flame duration</b>	Not applicable.

## 10. Stability and reactivity

### Chemical stability

**Possibility of hazardous reactions** Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. Toxicological information

### Potential acute health effects

<b>Inhalation</b>	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Ingestion</b>	No known significant effects or critical hazards.
<b>Skin contact</b>	No known significant effects or critical hazards.
<b>Eye contact</b>	No known significant effects or critical hazards.

### Acute toxicity

☑ Nitrocellulose	LD50 Oral	Rat	>5 g/kg	-
<b>Conclusion/Summary</b>	Not toxic.			

### Potential chronic health effects

#### Chronic toxicity

**Conclusion/Summary** Not toxic.

#### Irritation/Corrosion

**Conclusion/Summary** Not available.

#### Sensitiser

**Conclusion/Summary** Not available.

#### Carcinogenicity

**Conclusion/Summary** Not available.

#### Mutagenicity

**Conclusion/Summary** Not available.

#### Teratogenicity

**Conclusion/Summary** Not available.

#### Reproductive toxicity

**Conclusion/Summary** Not available.

**Chronic effects** No known significant effects or critical hazards.

**Carcinogenicity** No known significant effects or critical hazards.

**Mutagenicity** No known significant effects or critical hazards.

**Teratogenicity** No known significant effects or critical hazards.

**Developmental effects** No known significant effects or critical hazards.

**Fertility effects** No known significant effects or critical hazards.

### Over-exposure signs/symptoms



<b>Inhalation</b>	No specific data.
<b>Ingestion</b>	No specific data.
<b>Skin</b>	No specific data.
<b>Eyes</b>	No specific data.
<b>Target organs</b>	May cause damage to the following organs: central nervous system (CNS).

## 12. Ecological information

**Ecotoxicity** No known significant effects or critical hazards.

### Aquatic ecotoxicity

Nitrocellulose Acute EC50 579000 µg/l Fresh water Algae - Pseudokirchneriella subcapitata 96 hours

**Conclusion/Summary Persistence/degradability** No known significant effects or critical hazards.

**Conclusion/Summary** Not available.

**Other adverse effects** No known significant effects or critical hazards.

## 13. Disposal considerations

**Methods of disposal** The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

Regulation	UN number	Proper shipping name	Class	PG	Label	Additional information
ADG	Not regulated.					<p><b>Remarks</b></p> <p>The product is not regulated as Dangerous Goods for transport according to a expert opinion by BAM (Bundesanstalt für Materialforschung and -prüfung) with number 2.2-91/15-E on 12 May 2015.</p> <p>"The above named nitrocellulose membrane filters (in form of round filters, pre-cut parts and curved parts) do not fulfill the criteria of Class 1 'Explosives' and the division 4.1 'Flammable Solids' of RID/ADR (GGVSE), IMDG-Code (GGVSee) and the ICAO-Technical Instructions."</p>
ADR	Not regulated.					<p><b>Remarks</b></p> <p>The product is not regulated as Dangerous Goods for transport according to a expert opinion by BAM (Bundesanstalt für Materialforschung and -prüfung) with number 2.2-91/15-E on 12 May 2015.</p> <p>"The above named nitrocellulose membrane filters (in form of round filters, pre-cut parts and curved parts) do not fulfill the criteria of Class 1 'Explosives' and the division 4.1 'Flammable Solids' of RID/ADR (GGVSE), IMDG-Code (GGVSee) and the ICAO-Technical Instructions."</p>
IMDG	Not regulated.					<p><b>Remarks</b></p> <p>The product is not regulated as Dangerous Goods for transport according to a expert opinion by BAM (Bundesanstalt für Materialforschung and -prüfung) with number 2.2-91/15-E on 12 May 2015.</p> <p>"The above named nitrocellulose membrane filters (in form of round filters, pre-cut parts and curved parts) do not fulfill the criteria of Class 1 'Explosives' and the division 4.1 'Flammable Solids' of RID/ADR (GGVSE), IMDG-Code (GGVSee) and the ICAO-Technical Instructions."</p>



IATA		Remarks
Not regulated.		The product is not regulated as Dangerous Goods for transport according to a expert opinion by BAM (Bundesanstalt für Materialforschung and -prüfung) with number 2.2-91/15-E on 12 May 2015. "The above named nitrocellulose membrane filters (in form of round filters, pre-cut parts and curved parts) do not fulfill the criteria of Class 1 'Explosives' and the division 4.1 'Flammable Solids' of RID/ADR (GGVSE), IMDG-Code (GGVSee) and the ICAO-Technical Instructions."

## PG\* : Packing group

## 15. Regulatory information

**Standard Uniform Schedule of Medicine and Poisons**

Not regulated.

**Control of Scheduled Carcinogenic Substances****Ingredient name**

Not available.

**Schedule****Australia inventory (AICS)**

This material is listed or exempted.

**EU Classification**

F, R11

**HCS Classification**Flammable solid  
Target organ effects

## 16. Other information

**History**

Date of printing	08 February 2016	Date of previous issue	14 March 2014
Date of issue	08 February 2016	Version	4
 Indicates information that has changed from previously issued version.			

Enquiries regarding MSDS content should be directed to: our local sales office.

**Notice to reader**

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