GF Healthcare

SAFETY DATA SHEET

United States

Section 1. Identification

Product name

ME27, 0.8 µm 37 mm, 100 pack

Catalogue Number 10400909

Chemical name Nitrocellulose Other means of identification Not available. Product type Solid.

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

Identified uses

Use in laboratories

Industrial applications: Analytical chemistry. Research.

Supplier GE Healthcare UK Ltd

> Amersham Place Little Chalfont

Buckinghamshire HP7 9NA England

+44 0870 606 1921

GE Healthcare Bio-Sciences 800 Centennial Avenue

P.O. Box 1327

Piscataway, NJ 08855-1327

+ 1 800 526 3593

ChemTrec US (available 24/7) 1-800-424-9300 In case of emergency

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

FLAMMABLE SOLIDS - Category 2

GHS label elements

Hazard pictograms



Signal word Warning Hazard statements Flammable solid.

Precautionary statements

Prevention Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot

surfaces. - No smoking

Not applicable. Response Storage Not applicable. Not applicable. Disposal Hazards not otherwise classified None known.

Section 3. Composition/information on ingredients

Substance/mixture Substance Nitrocellulose Chemical name Other means of identification Not available.

CAS number/other identifiers

CAS number Not available. Product code 10400909

Ingredient name % CAS number



28414950

Validation date 10 February 2016

Nitrocellulose 90 9004-70-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional 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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation

occurs.

Inhalation No special recommendations.

Skin contact Wash with soap and water. Get medical attention if irritation develops.

Ingestion No special recommendations.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed

following exposure.

Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contactNo specific data.InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person

may need to be kept under medical surveillance for 48 hours.

Specific treatments No specific treatment.

Protection of first-aidersNo 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Hazardous thermal

Suitable extinguishing media Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media Do not use water jet.

Specific hazards arising from the Flammable solid.

chemical

CHEITHCUI

Decomposition products may include the following materials:

decomposition products nitrogen oxides

Special protective actions for fire-

fighters

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.

Special protective equipment for

fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive pressure mode.

Remark Product becomes a 'Flammable Solid category 2' after removing the membrane from the package.

If the product is still in it's original packaging it is not a 'Flammable Solid category 2'.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Eliminate all ignition sources. Vacuum or sweep up material and place in a designated, labeled waste

container.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on

suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions No special recommendations

Methods and materials for containment and cleaning up

Small spill Eliminate all ignition sources. Vacuum or sweep up material and place in a designated, labeled waste

container.





Large spill Eliminate all ignition sources. Vacuum or sweep up material and place in a designated, labeled waste container.

Section 7. Handling and storage

Precautions for safe handling

Protective measures Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes,

skin and clothing. 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 only non-sparking tools.

Advice on general occupational

hygiene

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. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls No special ventilation requirements.

Environmental exposure controls No special recommendations.

Individual protection measures

Hygiene measures 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.

Eye/face protectionSafety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the

this is necessary to avoid exposure to liquid spidsnes, mists, gases 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.

Skin protection

Hand protection 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.

Body protection 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.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the task

being performed and the risks involved and should be approved by a specialist before handling this

product.

Respiratory protection A respirator is not needed under normal and intended conditions of product use.

Section 9. Physical and chemical properties

Appearance

Physical state Solid. Not available Color Odor Odorless Not available Odor threshold рΗ Not applicable. Not available Melting point **Boiling point** Not available Not available. Flash point **Burning time** Not available **Burning rate** Not available **Evaporation rate** Not available.



9 5 2 8 4 1 4 9 5 0

Flammability (solid, gas) Product becomes a 'Flammable Solid category 2' after removing the membrane from the package.

If the product is still in it's original packaging it is not a 'Flammable Solid category 2'.

Lower and upper explosive

(flammable) limits Vapor pressure

0 kPa (0 mm Hg) [room temperature]

Vapor densityNot available.Relative densityNot available.

Solubility Insoluble in the following materials: cold water.

Solubility in water
Partition coefficient: n-octanol/

water

SADT

Not applicable.

Not available

Not available.

Auto-ignition temperature >160°C (>320°F)

Decomposition temperature Not available.

Viscosity Dynamic (room temperature): Not applicable.
Kinematic (room temperature): Not applicable.

Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous reactions

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

Conditions to avoidAvoid all possible sources of ignition (spark or flame).
Incompatible materials
Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary Not toxic

Irritation/Corrosion

Not available.

Sensitization

Not available.

<u>Mutagenicity</u>

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of Routes of entry not anticipated: Oral, Dermal, Inhalation.

exposure

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed

28414950

following exposure.

Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.



9 5 2 8 4 1 4 9 5 0

Page: 4/7

Symptoms related to the physical, chemical and toxicological characteristics

Eye contactNo specific data.InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

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

Short term exposure

Potential immediate effects Not available.
Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.
Potential delayed effects Not available.

Potential chronic health effects

Not available.

Conclusion/Summary Not toxic.

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary No known significant effects or critical hazards.

Persistence and degradability

Not available

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc) Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methodsThe generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Product is not regulated as dangerous goods for transport.



9528414950

Section 15. Regulatory information

U.S. Federal regulations TSCA 8(a) CDR Exempt/Partial exemption: All components are listed or exempted.

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)Not listedClean Air Act Section 602 Class I SubstancesNot listedClean Air Act Section 602 Class II SubstancesNot listedDEA List I Chemicals (Precursor Chemicals)Not listedDEA List II Chemicals (Essential Chemicals)Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312

Classification Fire hazard

Composition/information on ingredients

Name Fire Sudden Reactive **Immediate** Delayed hazard release of (acute) (chronic) pressure health health hazard hazard Nitrocellulose 100 Yes. Nο No. No.

State regulations

Massachusetts The following components are listed: COLLODION

New York None of the components are listed.

New Jersey The following components are listed: NITROCELLULOSE; CELLULOSE, NITRATE

Pennsylvania The following components are listed: CELLULOSE, NITRATE

International regulations

Canada inventory All components are listed or exempted.

International lists Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals
Chemical Weapons Convention List Schedule II Chemicals
Chemical Weapons Convention List Schedule III Chemicals
Not listed
Not listed

Section 16. Other information

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing2/10/2016.Date of issue/Date of revision2/10/2016.Date of previous issue9/24/2015.Version3



9 5 2 8 4 1 4 9 5 0

rticle Number : 28414950 Page: 6/7

Key to abbreviations ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by

the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



