SAFETY DATA SHEET

United States

Section 1. Identification

Product name
ME25/20 STL, 0.45 µm 50 mm, 400 pack

Catalogue Number
10407324

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

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

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.

Response
Not applicable.

Storage
Not applicable.

Disposal
Not applicable.

Hazard not otherwise classified
None known.

Section 3. Composition/information on ingredients

Substance/mixture
Substance

Chemical name
Nitrocellulose

Other means of identification
Not available.

CAS number/other identifiers

CAS number
Not available.

Product code
10407324

Ingredient name
% CAS number

Article Number: 28415197
Page: 17
Validation date 18 February 2016
Version 3
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 contact No known significant effects or critical hazards.
Ingestion No known significant effects or critical hazards.

Over-exposure signs/symptoms
Eye contact No specific data.
Inhalation No specific data.
Skin contact No specific data.
Ingestion No 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-aiders 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

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 chemical Flammable solid.
Hazardous thermal decomposition products Decomposition products may include the following materials: 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.
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 protection
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, 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.

Color
Not available.

Odor
Odorless.

Odor threshold
Not available.

pH
Not applicable.

Melting point
Not available.

Boiling point
Not available.

Flash point
Not available.

Burning time
Not available.

Burning rate
Not available.

Evaporation rate
Not available.
**Flammability (solid, gas)**

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’.

**Lower and upper explosive (flammable) limits**

Not available.

**Vapor pressure**

0 kPa (0 mm Hg) [room temperature]

**Vapor density**

Not available.

**Relative density**

Not available.

**Solubility**

Insoluble in the following materials: cold water.

**Solubility in water**

Not applicable.

**Partition coefficient: n-octanol/water**

Not available.

**Auto-ignition temperature**

>160°C (>320°F)

**Decomposition temperature**

Not available.

**SADT**

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 avoid**

Avoid 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.

**Mutagenicity**

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 exposure**

Routes of entry not anticipated: Oral, Dermal, Inhalation.

**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 contact**

No known significant effects or critical hazards.

**Ingestion**

No known significant effects or critical hazards.
Symptoms related to the physical, chemical and toxicological characteristics

- **Eye contact**: No specific data.
- **Inhalation**: No specific data.
- **Skin contact**: No specific data.
- **Ingestion**: No 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**

- **Conclusion/Summary**: Not toxic.
- **General**: 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.

Numerical measures of toxicity

- **Acute toxicity estimates**: Not available.

Section 12. Ecological information

**Toxicity**

- **Conclusion/Summary**: No known significant effects or critical hazards.

**Persistence and degradability**

- **Conclusion/Summary**: Not available.

**Bioaccumulative potential**

- **Conclusion/Summary**: Not available.

**Mobility in soil**

- **Soil/water partition coefficient (K_OC)**: Not available.

**Other adverse effects**

- **Conclusion/Summary**: No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods**

The 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.**
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 listed

Clean Air Act Section 602 Class I Substances
Not listed

Clean Air Act Section 602 Class II Substances
Not listed

DEA List I Chemicals (Precursor Chemicals)
Not listed

DEA 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

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrocellulose</td>
<td>100</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

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
Not listed

Chemical Weapons Convention List Schedule II Chemicals
Not listed

Chemical Weapons Convention List Schedule III Chemicals
Not listed

Section 16. Other information

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

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History
Date of printing
2/18/2016.

Date of issue/Date of revision
2/18/2016.

Date of previous issue

Version
3
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
UN = United Nations

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