

GAMMON TECHNICAL PRODUCTS

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MATERIAL SAFETY DATA SHEET

MSDS/SDS for Millipore Membranes

Issue Date: October 15, 2015

Latest Revision Date: September 12, 2019

Product Name: Nitrocellulose Membrane Filters

Catalog Number(s): GTP-1983

GTP-1984

Used in GTP-1985

Used in GTP-1986

Used in GTP-323

Used in GTP-172 Mark II

Chemical Name: Nitrocellulose/Filtration membranes

Manufacturer: Millipore

See attached MSDS sheet for all of the membranes listed above, Millipore #6A6981

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Date of issue: 10/14/2015 Version 1. 1

SECTION 1.Identification

Product identifier

Product number 6A6981

Product code JBRAAWPGTP

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

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

Identified uses Reagent for research and development

Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978- 715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS Classification

Flammable solid, Category 1, H228

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

GHS-Labeling

Hazard pictograms



Signal Word

Danger

Hazard Statements

H228 Flammable solid.

Precautionary Statements

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

P240 Ground/bond container and receiving equipment.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature

Contains nitrocellulose.

Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

cellulose nitrate (>= 70 % - < 90 %)

9004-70-0

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

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

water/ shower.

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

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

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Risk of methemoglobin formation.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO2), Dry powder

Unsuitable extinguishing media

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

Special hazards arising from the substance or mixture

Combustible.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

Spontaneous ignition at elevated temperatures.

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

Fire may cause evolution of: nitrogen oxides, nitrous gases

Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Suppress (knock down) gases/vapors/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

Personal precautions, protective equipment and emergency procedures

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.

Environmental precautions

Do not let product enter drains. Risk of explosion.

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.

SECTION 7. Handling and storage

Precautions for 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.

Conditions for safe storage, including any incompatibilities

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

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

Performing regular visual inspections of membranes and keeping accurate records of recommended shelf life can reduce the risk of membrane deterioration. Membranes or loaded plastic monitors should be stored at no more than +75°F (22°C) or they will degrade over time and can even "auto-ignite" under extreme temperature conditions. 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 a 36 month expiration date given to all triton 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.

Advice on common storage

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

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

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

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eve/face protection

Safety glasses

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.

Other protective equipment: protective clothing

Respiratory protection

required when dusts are generated.

SECTION 9. Physical and chemical properties

Physical state solid

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1. 1
Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

Color black

Odor No strong odor known.

Odor 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.

Vapor pressure No information available.

Relative vapor 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.

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

SECTION 10. Stability and

reactivity 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.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

Chemical stability

Product is sensitive to light and moisture.

Prolonged exposure to air may cause discoloration.

Possibility of hazardous reactions

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

Oxidizing agents, Bases, Strong acids

Conditions to avoid

Heating (decomposition). Exposure to sunlight.

Incompatible materials

no information available

Hazardous decomposition products in the event of fire: See section 5.

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Carcinogenicity

Carcinogen classifications of IARC, NTP, California proposition 65 for Ethanol CAS 64-17-5 apply to beverage use only. This product is NOT intended for this use.

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

carcinogen by ACGIH.

Further information

After uptake of large quantities:

Risk of methemoglobin formation.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

Ingredients

cellulose nitrate

No information available.

SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Additional ecological information

Discharge into the environment must be avoided.

Ingredients

cellulose nitrate

No information available.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

UN number UN 3270

Proper shipping name NITROCELLULOSE MEMBRANE FILTERS

Class 4.1
Packing group II
Environmentally hazardous --

Air transport (IATA)

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

UN number UN 3270

Proper shipping name NITROCELLULOSE MEMBRANE FILTERS

Class 4.1
Packing group II
Environmentally hazardous -Special precautions for user no

Sea transport (IMDG)

UN number UN 3270

Proper shipping name NITROCELLULOSE MEMBRANE FILTERS

Class 4.1
Packing group II
Environmentally hazardous --Special precautions for user yes
EmS F-A S-I

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

US State Regulations

Massachusetts Right To Know

Ingredients cellulose nitrate

Pennsylvania Right To Know

Ingredients cellulose nitrate

New Jersey Right To Know

Ingredients cellulose nitrate

California Prop 65 Components

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 6A6981 Version 1.1

Product name MEMBRANE AAWP 37MM 0.8UM WITH PADS

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

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.

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

H228 Flammable solid.

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.

Date of issue: 10/14/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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