

Safety Data Sheet

Issue Date: 18-Sep-2023

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Version 1

1. IDENTIFICATION

Product identifier

Product Name Nitrocellulose membrane

Other means of identification

SDS # SYS-080

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals.

Details of the supplier of the safety data sheet

Supplier Address

Sysmex America, Inc.
577 Aptakistic Road
Lincolnshire, IL 60069
USA

Company Phone Number 224-543-9500

Emergency telephone number

Emergency Telephone ChemTel Inc. 800-255-3924 (North America)
1-813-248-0585 (International)

2. HAZARDS IDENTIFICATION

Appearance According to product specification

Physical state Solid

Odor Odorless

Classification

Flammable solids	Category 1
Combustible dust	

Signal Word

Danger

Hazard statements

Flammable solid
May form combustible dust concentrations in air



Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Cellulose nitrate	9004-70-0	>99

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Take affected persons out into the fresh air. Do not leave affected persons unattended.
Eye Contact	Rinse opened eye for several minutes under running water. Call a doctor immediately.
Skin Contact	Immediately wash with water and soap and rinse thoroughly.
Inhalation	Supply fresh air; consult doctor in case of complaints.
Ingestion	Call a doctor immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	May be harmful if swallowed.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Formation of toxic gases is possible during heating or in case of fire. Dust can form an explosive mixture with air.

Hazardous combustion products Nitrogen oxides (NO_x).

Explosion Data

Sensitivity to Static Discharge AVOID GENERATING DUST. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Ensure adequate ventilation. Wear protective clothing. Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Environmental precautions Do not allow product to reach sewage system or any water course. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Carefully sweep, scoop or vacuum and place in suitable container. Avoid generating dust or accumulating dust. Avoid dust dispersal in the air (i.e. cleaning dust surfaces with compressed air). Spilled material can be a slipping hazard. Eliminate flames, sparks, excessive temperatures and oxidizing agents. Non-sparking tools should be used.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/bond container and receiving equipment. Use explosion proof equipment. Wear protective gloves/protective clothing and eye/face protection. Avoid generation of dust. Avoid breathing dusts. Avoid contact with skin and eyes. Minimize dust generation and accumulation. Ensure that dust does not accumulate on surfaces.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in closed, properly labeled containers in a cool, ventilated area. Do not transfer contents to bottles or other unlabeled containers. Keep away from heat, open flames and oxidizing agents. Store away from foodstuffs.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Explosion-proof general and local exhaust ventilation. Use explosion proof electrical equipment for very high dust levels. Ensure ventilation and dust-handling systems prevent the escape of dust into work areas and there is no leakage from equipment. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tightly sealed goggles. Refer to 29 CFR 1910.133 for eye and face protection regulations.
Skin and Body Protection	Protective gloves. Refer to 29 CFR 1910.138 for appropriate skin and body protection.
Respiratory Protection	Nuisance dust mask 3M type 8710 or equivalent. (Recommended). Refer to 29 CFR 1910.134 for respiratory protection requirements.
General Hygiene Considerations	The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Do not inhale gases/fumes/aerosols. Avoid contact with the eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Solid	Odor	Odorless
Appearance	According to product specification	Odor Threshold	Not determined
Color	According to product specification		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	No data available		
Melting point / freezing point	No data available		
Initial boiling point and boiling range	No data available		
Flash point	No data available		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Flammable solid		
Flammability Limit in Air			
Upper flammability or explosive limits	No data available		
Lower flammability or explosive limits	No data available		
Vapor Pressure	Not determined		
Vapor Density	No data available		
Relative Density	Not determined		
Water Solubility	Insoluble in water		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition temperature	Product is not self igniting		
Hyphen	Not determined		
Kinematic viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Product does not present an explosion hazard		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Risk of dust explosion if enriched with fine dust in the presence of air. Reacts with acids, alkalis and oxidizing agents. Flammable. Self-igniting when heated.

Conditions to Avoid

Incompatible Materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Do not inhale.

Ingestion May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Cellulose nitrate 9004-70-0	> 5 g/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are considered carcinogens.

Chemical name	ACGIH	IARC	NTP	OSHA
Cellulose nitrate 9004-70-0		Group 2A		X

Legend

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 5,000.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Not determined

Other adverse effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Cellulose nitrate 9004-70-0	Ignitable in ether and alcohol Reactive in ether and alcohol

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN3270
Proper Shipping Name Nitrocellulose membrane filters
Transport hazard class(es) 4.1
Packing Group II

IATA

UN number or ID number UN3270
Proper Shipping Name Nitrocellulose membrane filters
Transport hazard class(es) 4.1
Packing group II

IMDG

UN number or ID number UN3270
Proper Shipping Name Nitrocellulose membrane filters
Transport hazard class(es) 4.1
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIIC
Cellulose nitrate	X	ACTIVE	X		X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Cellulose nitrate 9004-70-0	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	Flammability	Instability	Special hazards
	-	-	-	-
<u>HMIS</u>	Health hazards	Flammability	Physical hazards	Personal Protection
	-	-	-	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet